

## When We Were Young – Chapter 5

"Is the power back on in Flagstaff?"

"Doesn't matter, we'll track them down if we have to."

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Each dealer had 3 demos and that was the extent of our choice. Can anyone explain why they always choose the biggest, fanciest homes as displays? No, they didn't want to sell their demos, but they could be persuaded. No, they didn't really want to deliver them, but they could be persuaded, and no, they didn't really want to assemble them either, but, you've got it, they could be persuaded. I figured each one of those *they could be persuaded* cost me an extra grand or two, but it was only money and I brought plenty.

When I laid down enough cash for the first home, some of those 'could be persuaded' started to disappear. By the time I laid out enough cash to pay for the third, delivery and installation were included. For all the trouble we went to making sure the ladies approved, we could have left them home. Besides, how much longer would greenbacks be good, if indeed the power outage was widespread and continued? The Drill Sergeant said, "Smoke 'em if you got 'em." They don't give any second chances.

We went to town when we got home and found a contractor to put in the plumbing and electric. Eight homes and 80kw between 2 generators would work out about right. We explained we had everything they needed on hand, including electricity and fuel. He said he'd see us tomorrow. (see tip #16 about keeping a little cash on hand) Circumstances dictate how much is a little cash. A million here, a million there, pretty soon we're talking about real money. (Everett Dirksen – A billion here, a billion there, pretty soon, you're talking real money. I am a man of fixed and unbending principles, the first of which is to be flexible at all times.)

Is 80kw enough for 8 homes and 2 places of business? Not hardly, it was beginning to get rather warm out. The solution came in the form of a pair of Kohler 150REOZJB, which consumed between 3.4 and 10.9gph, each. Each was rated at 417amps prime, 458 amps standby. I paid cash and used the remaining cash to put in another pair of 40,000-gallon fuel tanks for diesel (B50). It was three phase so we needed an electrician to install power distribution. We could go for a long time on 120,000-gallons of fuel at max power. Maybe it wasn't my best purchase, but the electricity still wasn't on. It didn't come on until the generator was installed and had run for about 10 hours. The synchronizers were built into the Kohler controllers.

"Are your broke yet?"

"Not yet, but I'm down to \$100 thou, in cash."

"You almost make me wish I was a girl and you were a drunken sailor, we have a good time while it lasts."

"What should we call our housing development?"

"Money down the hole?"

"You just wait until the price of gold tops \$1,200 an ounce, we'll be the richest people in northern Arizona."

"What do you mean we white man? I don't have any gold."

"You will, just as soon as we start selling off those guns."

"But the power is back on."

"In some places, Matt. I think the real problem is going to be getting food. Most of the food we eat has to be transported and processed. That takes fuel and electricity. A lot of that food comes from California and Louisiana leads the country in the production of rice. Unless the alcohol producing companies can bring new ethanol plants online processing cellulose, we're going to be short on fuel. How much biodiesel is produced from soybeans? I don't know the exact answer but, in general, not enough."

"What about fuel imports?"

"What about them? I don't know, but I'd be willing to bet the oil producing countries will need money for food and it won't be long before the price is over \$100 a barrel."

"That translates into gas that goes for what, \$6 a gallon?"

"Or more. Think about it, if there are food shortages, not all of the corn and soybeans are going to go into fuel. We're looking at quite a lead time to get the cellulose processing plants online."

"Is that why we have 120,000-gallons of diesel fuel?"

"The DI said, 'Smoke 'em if you got 'em.' They didn't give any second chances."

"If that's the case, what about gasoline? Those VWs don't run on E-85."

"I have \$100 grand left, let's put in a fuel station tank and fill it with unleaded. We can load up on PRI-G and keep it stabilized for as long as it takes. Besides, I think we can get the bugs modified."

"What about the guns and gold?"

"We'll only accept gold or silver for guns and ammo at prevailing market rates, less a small discount. Have you ever bought gold? If you buy it you pay over market and if you sell it, they give you under market. We can watch that and only discount it by about 50% of what the traders usually charge. Let the other traders take the risk of Federal Reserve notes. If we do decide to take cash, we use it to buy food and fuel."

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It was strange, we hadn't seen mushroom clouds, the ground hadn't shaken and the wind hadn't blown. We were, nonetheless, in the middle of what was proving a full scale disaster. I had more cash, maybe a quarter million, but that was for food and fuel. It isn't wise to show your hole cards when you're playing poker. This wasn't Texas hold 'em, it was more like showdown and your life was the ante. If the prognostications were right, people would get hungry. Hungry people will do nearly anything for food; it's a matter of life or death. The sooner you recognized that, the sooner you took steps to prevent it.

What we couldn't get anywhere else we got from Costco, Sam's Club, grocery stores or anyone who had it. We had cash, it helped. We bought in bulk. That helped more. If we could bite the bullet, put in a fence and purchase livestock, that would be even better. Sometimes we paid cash, sometimes gold and silver and on occasion parted with a weapon and ammo to get something we really needed. We were very discrete, not buying locally. We'd lie when they asked where we were from, usually saying Phoenix, Tucson, Kingman or Prescott. A cow could provide us with milk, a bull kept her producing and provided meat. We had a leg up, a storage room filled to overflowing with food.

"Mom. Dad this is Tom."

"You look familiar, what's your last name?"

"Adams. You may know my brother Jim."

Tom was Jim's older brother and Liz's original target, years before. They had been friends for a very long time and when she returned to Sedona in 2004, they started to renew the friendship and that blossomed into a romance. I'd seen his name and struck it from my list, probably because of his brother. Liz was sporting a diamond and handed me a document I immediately recognized as a marriage license. Filled in no less, a day before.

"Tom, welcome to the family. I'll be damned, I never would have thought. Did you bring your things, your new home is ready to occupy?"

"I've been moving his things in for a week, Daddy, you've been so busy cornering the market on things we might need, you never noticed."

Man, strip my gears and call me shiftless, I couldn't believe it. I knew Tom and had for a long time, I even mentioned his name to her more than once, but she'd feigned a lack of

interest. Brat. I didn't even ask, I went after the rifles, the model 70 for her and a HK91 for him.

"You know where the weapons are honey, help yourself. Sue do you have a ch..."

She did and it was made out for \$20,000.

"Take that to the bank and cash it, quickly, everyone is here and it's time to batten down the hatches."

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"Rob, what about my parents?"

"They're welcome of course, but I bought out the available mobile homes in Flagstaff."

"They live in a singlewide trailer."

"Liz knows which contractor we use, have him extend the water, sewer and electrical and get someone to move their home in and install it."

"Will your system handle another home?"

"I gave in and bought a pair of 150kw diesel generators; we had 360kw available if we lose power again. Say, were you in the service?"

"Rangers."

"Then you know your weapons, right?"

"Yes, of course."

"You satisfied with the HK91 or would you prefer something different?"

"That's a good rifle, but I'm sniper trained."

"As in?"

"We used the M107."

"Ever shoot an M82A1?"

"The semi auto? Sure, we trained on it, but they issued us the M107."

"Are you any good?"

"31 kills."

"My boy, come with me, I have a wedding bonus for you."

"There you go, feast your eyes on that."

"What kind of scope?"

"Nightforce 12-42x56mm scope with MUNS and we have Raufoss ammo for them."

"Them?"

"We don't have one of anything. The suppressor is a Jet titanium."

"Do you have suppressor for the HK91 and Model 70?"

"Surefire ok?"

"Cripes, you know they are. Question, who are we going to shoot?"

"Anyone who attempts to take what we have without asking."

"Handguns?"

"USP Tactical ok?"

"Suppressed?"

"If you want."

"What does Liz carry?"

"Springfield Armory XD .45. It fits her hand better. I'll get you a PPK .380 for a backup gun. Web gear is over there and the knives are in the Cold Steel section."

"Are you planning on a war or something?"

"Tom, the Cold War supposedly ended 15 years ago. By then, we had most of this in place. However, we woke up one morning and the world had changed. Morality had gone into the toilet and someone had flushed it. We were becoming the world's policeman, going here and there sorting out other people problems. The government had found a way to circumvent most parts of the Constitution that meant anything to a fella like me. We were all worried about the next disaster but didn't have a clue when it happened on 9/11."

"We got into Afghanistan and then Iraq. It worked so good we ended up staying. Bush said the war was over when the fatality count was under 200 and now it's over 2,500. If we're staying until the Iraqis get it perfect, we're going to be there a very long time. I used to pay 30 cents for gas and now it costs \$35 to fill the tank of a compact. Our power grid is challenged, to say the least, and it appears there are looming food shortages. The three major needs of humans is probably the main reason for nations to go to war. These needs are food, water and shelter. If a nation or group is deprived of these essentials they resort to war in an attempt to fix the problem."

"You left out religion."

"Call that number 4. Let me give you a hand with your things."

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"The kids are renting a U-Haul and going to Phoenix to pick up their things."

"When?"

"This weekend."

"I hope they have lights totally restored by then."

"Liz and Tom are going with them to help."

"That's different, they'll be ok. I can't believe Liz; she married a Ranger who was a sniper to boot. There is nothing wrong with her picker."

"I'd have thought you'd be concerned that he was a good man who could take care of her."

"Liz can take care of herself if she needs to. It isn't every soldier who gets to be a Ranger or every shooter who becomes a sniper. It shows a sense of discipline. Tom had to be waiting for just the right woman, too. He's 2 years older than his brother and has never been married."

"You're disciplined too, Rob. All these years of being frugal were irritating, but it appears they've paid off."

"Sometimes I wish I had the XKE and the brunette."

"Huh?"

"I bought the 100 shares of IBM stock with money I was saving to buy a jag. When they debuted the car in '61 in New York, they had the Playmate of the month from June of '59 introduce it."

"With the money we have, I'm sure you could find one."

"I like the brunette I got and I've outgrown the car."

"And you're sure you don't want to trade me in on a newer model?"

"After 34 years? My wife would kill me."

"In a heartbeat and don't you forget it."

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Call it an overabundance of caution, but I talked it over with Matt and we decided there were some things we should do. Any member of the families who didn't have a passport should get one, immediately. We hadn't been immunized in many years and he and I agreed that if conditions worsened, they might come in handy so we were going to arrange to have everyone vaccinated. He claimed to know a doctor in Phoenix who might be able to get us vaccinated for the bird flu. He suggested that while we were at it, the 6 of us get complete physicals.

The twins and their husbands had left good paying jobs behind but the fellas thought their employers would allow them to telecommuter, they were computer programmers, and the twins thought they'd stay home and attend to their families. As far as telecommuting went, they could do it, once the T-1 line was up and running.

Matt, Jr. was a diesel mechanic and a good one. He was factory certified to be able to work on just about every diesel engine there was, he wouldn't have trouble finding work here or in Flagstaff. He was married and they had a baby on the way. The twins had married twins; I considered the possibilities of that for a moment before I got my mind out of the gutter.

The TV reported that Israeli tanks were poised on the Gaza border to secure the release of a kidnapped soldier. It seemed as if we were watching the digital clock on a bomb countdown to zero and unable to do anything about it. The main news was the power outage. California had riots in LA, San Francisco, Oakland and San Bernardino. Chicago, Detroit, and New York weren't any better off and the President was openly discussing suspending Posse Comitatus and Habeas Corpus. That was the good news, the bad news was that the Department of Agriculture was now estimating a further drop in grain yields, down as much as 5%. The price of oil was hovering just below \$80 a barrel.

"Ok, could I get you to all quiet down for a moment, please?"

Yacky-yak...

"Thank you. We're going to Phoenix on Friday rather than Saturday. If anyone doesn't have a passport, get to town and get the photos taken, Matt and I have blank applications. Second, we've arranged for everyone to get their vaccinations updated and that may possibly include the bird flu vaccine. If it does, we'll have to make a second trip to get the second shots or bring the second shots back with us."

"Three, we 6 seniors will be getting physicals just to confirm the state of our health. Four, Matt and I are going to drive down 24' U-Haul trucks and hit every Costco and Sam's Club in the Phoenix area. Anyone with any special needs talk to Sue or Sarah. And, last but not least, we need to know any medications that anyone takes so we can arrange to stockpile them."

"What's going on, are we being invaded?"

"We have never had a famine in this country, kids. That could soon change; the USDA announced a 5% reduction in the expected crop yields on top of the already reduced expectations. We're in the midst of an energy crisis like nothing we've ever seen before. It was bad before, but with the solar flare taking out the electricity, the country is starting to fall apart. Does anybody know anything about ranching?"

Matt, Jr.'s wife Rebecca raised her hand.

"Becky?"

"We raised cattle and hogs. Mom had a flock of chickens."

"We you in 4H or anything?"

"No, but I gathered the eggs."

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"Is all that money you have going to buy your way out of this one Rob?"

"Yep. We can hire somebody to put in a fence and another somebody to build a barn. We can use the money to buy the livestock we need and hire ranch hands. We can even pay cash for some repossessed mobile homes. We've lived clean, decent lives, Matt. An old fable says that God helps the man who helps himself and you can't say we haven't worked hard and lived moral lives."

"Turning religious on me?"

"I think that comes with getting older and closer to our Maker. Subconsciously we begin to hedge our bets. Some might say that being arms dealers, we're in league with the Devil, but a firearm is just a tool and it's the person who misuses it that in league with



the Devil. Three Faiths, One God: Judaism, Christianity, Islam and we can't just get along.

"Amen, brother Rob."

We six (including Tom's parents) were poked and prodded, had chest X-rays, donated blood to the lab and peed in a cup. Subject to the lab results, we were in good condition, given our age. Then we went to the clinic that gave the vaccinations and it was worse than being in boot camp. We got the first flu shot and the doctor sent the second bottle of vaccine home with us. Under certain special circumstances, a Passport can be issued on the spot, especially if you know the right politician.

Power was back on in Phoenix, for the most part, and it was very hot. We shopped from a list while the kids got their things and by Saturday night we were totally done in. Matt and I were tempted to get a motel, but the youngsters offered to drive home and put things away when we got there. It was July 1, 2006.

An energy cost flow analysis for Arizona done in 2003 showed that Arizona imported natural gas, petroleum and electricity and exported a small amount of coal. Arizona Public Service, Salt River Project and Tucson Electric Power represent 97.6% of the electric power sold in Arizona. Most of their revenues leave the state.

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"What's next?"

"Maybe we should hire a ranch foreman and put him in charge of getting the fence put in, raising a barn and hiring hands, unless you have a better suggestion."

"About all I know about farming is that cows moo, pigs oink and chickens cluck."

"Ever ride a horse?"

"I was on a train (iron horse) once, does that count?"

"Well, crap, I wouldn't even know who to hire."

"Ask your new son-in-law."

"Tom or Peter?"

"Tom."

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"Ask my father, he worked on a ranch for a while."

Tom's father was named Tom and his wife was Ruth. I had a word or two with him and he said he knew who to ask about getting a ranch foreman. I asked him if he felt up to taking care of that for us and possibly even working with the new foreman we hired to keep him on the straight and narrow. He said that Tom could do that but he'd help him find the foreman. Matt had a suggestion that I took, we decided to call the place Rob's Roost. I mentioned that to Tom and he said he'd get a couple of poles put in and a sign painted for over the entrance to the place.

With as many people as we had here, and Independence Day on Tuesday, we laid in several racks of baby back ribs so we could have a picnic. Our menu for the picnic turned out to be slow cooked baby back ribs, coleslaw, baked beans and potato salad. We had a case of beer if anyone one wanted one and our fair share of soft drinks plus lemonade made from fresh lemons from Phoenix. We put up two of the awnings for shade and had a very good day.

"What's that bell?"

"The generator kicked in. I'll go turn the bell off; it's on a holding circuit."

"What he means, Tom," Matt explained, "Is that the bell will ring until he breaks the circuit. Otherwise we might not know that we were on generator power. There is also a light that only comes on when we're on the generator so when it goes out, we're back on regular power."

"Why is that important?"

"It lets us know to check the fuel level in the tanks."

"Speaking of tanks, you've added 7 homes and are still on the same propane tank. If you add 2 or 3 more for the ranch hands, you're going to need a much larger tank."

"It's already here, Rob bought a used 30,000 gallon tank with new pressure relief valve."

"Liz never said anything about the two of you being wealthy."

"Liz wouldn't and Rob has about double what I have, he bought 100 shares of IBM stock in 1960 and held it until recently."

"Is that a lot?"

"Yes, that's a lot. He let his brokerage hold the shares and had them reinvest the dividends, Tom. Sue and he could retire on that alone."

"I'm surprised that Liz didn't say anything."

"She wanted to be sure you wanted her and not her father's money, I'd expect."

"Who knew that you guys were so successful? You have an out of the way gun shop specializing in class III weapons and assault rifles. As far as I know, you don't even advertise."

"We have a website, but it isn't a large site and we don't do online orders."

"I'm back. I wonder how long the power will be down this time."

"I'm just guessing Rob, but it will be down until it comes back on."

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The man we got suggested that we didn't need ranch hands, only one. He knew his livestock and even suggested that if we had enough water, we could grow our own grass and buy a little feed and baled hay. His name was Miguel Ruiz, he was married to Maria and they had 2 teenaged sons. Matt and I went to Flagstaff and picked up a really good 16'x80' repo.

July was hot and busy and about  $\frac{2}{3}$  of the time, we were running on one or more generators. One contractor put in a fence with pig wire and 3 strands of barbed wire at the top. A second erected a prefabricated barn he got from a manufacturer (Castlebrook) in California. We erected shade over the corral and by August were looking for livestock.

In the livestock department, we bought two pregnant tan-colored sows (York), 4 Black Angus cows, a bull, and 4 steers. It was the wrong time of the year to buy pullets, but we did manage to get a small flock of setting hens and some roosters. That required another building, a chicken coop/hen house.

Even without advertising, sales were good, almost too good. We couldn't sell any class III weapons because the government was occupied putting down riots and generally making a nuisance of itself. We decided to go ahead and take cash along with gold and silver but no checks or credit cards. That may have cost us some business, but sales were good enough that we didn't care.

We began to suspect some of these people weren't from Arizona, but technically, we could sell rifles to people from bordering states, including California. The ATF and the law said, "A person may only acquire a firearm within the person's own State, except that he or she may purchase or otherwise acquire a rifle or shotgun, in person, at a licensee's premises in any State, provided the sale complies with State laws applicable in the State of sale and the State where the purchaser resides. A person may borrow or rent a firearm in any State for temporary use for lawful sporting purposes."

Therefore we couldn't lawfully sell firearms to people who resided in California because of the California law and the types of weapons we sold. The law said *where the pur-*

*chaser resides*, not where the purchaser got his identification. As long as the purchaser gave a Arizona address as his/her residence and passed the instant background check we sold the firearm. We tried calling a few times and one of two things happened: either someone answered the phone and confirmed that our purchaser resided there or no one answered the phone because the purchaser was in our store, not at home. BTW, the Arizona Constitutional guarantee to the right to carry arms prohibited raising or maintaining a paid private militia.

We didn't see the problem selling a purchaser a M1A rifle, the only thing wrong with it was the flashhider. We made them promise to put a muzzle brake on it if it ever ended up in California. We had the muzzle brakes if they wanted them and a few actually bought them. A Mini-14 was legal in California and we carried Butler Creek folding stocks, flashhidiers and 30-round PMI magazines. Generally, he would buy the weapon and she would buy the accessories. Not our problem, we didn't require ID to buy accessories, unless it was a kid. We didn't do anything that would get the feds or Arizona angry with us.

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This turned out to be a learning experience, what went in the front of those animals didn't smell nearly as good when it came out the other end and the pigs were the worst. How could anything that smelled that bad taste so good when it was slow cooked on a grill with a coating of KC Masterpiece?

Matt's two girls and our 3 got together with Maria and began to talk about gardening. It wasn't something we could do in July, but we didn't really need the food at the moment. Now that had possibilities because the choices in the stores these days weren't what they'd been as recently as 3 months back. This soil was sandy and we thought it wouldn't produce much. Maria said it would if we could provide enough water. I got on the phone to Paul in Phoenix and asked him if his records showed how deep the well they drilled was. He told me the records were in storage, call back in a week and he'd have an answer.

I checked with each of the kids and Jack said they could continue their dig from here. There was something about Peter that grated on me but both he and Julia had talked to the school district and had jobs teaching this fall in Sedona plus Tom worked with Miguel on the ranch. Liz was working in the store and the T-1 was back up and our programmers were telecommuting. Matt, Jr. was working for a dealer in Flagstaff. Did I miss anyone, with all the people here, it was getting confusing.

From the time they were old enough to understand, we drilled the kids, telling them if the crap hit the fan, head home – we're prepared. I never thought it would come to us trying to ranch/farm this half section; it was high desert sand with more than a fair share of rock. People tend to underestimate the fertility of that sand, we did. It was a bad time to try and irrigate, transportation costs were climbing and many factories were shut down due to the lack of and or an intermittent power problem.

They had terrible floods on the east coast, especially Pennsylvania and Maryland, further reducing the food supply. Paul called back to say our well was in a deep aquifer and if we didn't have water, no one would. That fence the contractor put in was expensive – barbed wire is effective for cattle and horses, but not for pigs, sheep, or goats. Where these animals are to be fenced, woven wire is used instead, often with one or several strands of barbed wire at the top. For swine, a ground-level barbed wire strand is used as well to prevent digging. Woven wire is costly to purchase and time-consuming to install.

"Miguel, we bought cows, how come we aren't getting milk?"

"They haven't freshened."

"Is there any other kind of milk other than fresh milk?"

"They haven't started to produce milk yet, Rob."

"I don't know what you're feeding those pigs, but they need a change of diet. Talk about stink. Where are you going to get the meat cut up?"

"Casey's in Flagstaff, they're good and it's not like we have a lot of choices. Do you have a large freezer?"

"There's a freezer under the refrigerator and we have a 17ft<sup>3</sup> upright."

"That will never do, you'd better buy some of 25ft<sup>3</sup> chest types. There are 10 couples plus the children here, you'll be butchering 10-12 hogs and 2-3 beef per year."

"We'll get more pigs and calves than that won't we?"

"Yes, the first year we'll butcher the males and keep the females. That will give you a herd of sows and you'll be a pork producer. It will be the same thing on the cattle, but it will take several years to build a herd. There's a limit to how many cattle the land will support, even planting grass. You really need some horses so we can round up the cattle."

"Next thing I know, you'll want cowboy guns. Don't worry about that Miguel, Dave went broke and we bought him out. We have Colts, Berettas, Ruger Vaqueros, Ruger New Vaqueros and Ruger Blackhawk's. We also have an assortment of Winchester and Marlin rifles. Mostly it's cowboy action shooters who buy those weapons."

"I could never afford one."

"Peshaw, if you need one, it's a tool of the trade and we'll furnish it, just tell Tom or Liz what you need and you'll have it."

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Resolution 1695 (2006)

Adopted by the Security Council at its 5490th meeting, on 15 July 2006

The Security Council,

Reaffirming its resolutions 825 (1993) of 11 May 1993 and 1540 (2004) of 28 April 2004,

Bearing in mind the importance of maintaining peace and stability on the Korean peninsula and in north-east Asia at large,

Reaffirming that proliferation of nuclear, chemical and biological weapons, as well as their means of delivery, constitutes a threat to international peace and security,

Expressing grave concern at the launch of ballistic missiles by the Democratic People's Republic of Korea (DPRK), given the potential of such systems to be used as a means to deliver nuclear, chemical or biological payloads,

Registering profound concern at the DPRK's breaking of its pledge to maintain its moratorium on missile launching,

Expressing further concern that the DPRK endangered civil aviation and shipping through its failure to provide adequate advance notice,

Expressing its grave concern about DPRK's indication of possible additional launches of ballistic missiles in the near future,

Expressing also its desire for a peaceful and diplomatic solution to the situation and welcoming efforts by Council members as well as other Member States to facilitate a peaceful and comprehensive solution through dialogue,

Recalling that the DPRK launched an object propelled by a missile without prior notification to the countries in the region which fell into the waters in the vicinity of Japan on 31 August 1998,

Deploring the DPRK's announcement of withdrawal from the Treaty on Non-Proliferation of Nuclear Weapons (the Treaty) and its stated pursuit of nuclear weapons in spite of its Treaty on Non-Proliferation of Nuclear Weapons and International Atomic Energy Agency (IAEA) safeguards obligations,

Stressing the importance of the implementation of the Joint Statement issued on 19 September 2005 by China, DPRK, Japan, Republic of Korea, the Russian Federation and the United States,

Affirming that such launches jeopardize peace, stability and security in the region and beyond, particularly in light of the DPRK's claim that it has developed nuclear weapons,

Acting under its special responsibility for the maintenance of international peace and security,

1. Condemns the multiple launches by the DPRK of ballistic missiles on 5 July 2006 local time;
2. Demands that the DPRK suspend all activities related to its ballistic missile programme, and in this context re-establish its pre-existing commitments to a moratorium on missile launching;
3. Requires all Member States, in accordance with their national legal authorities and legislation and consistent with international law, to exercise vigilance and prevent missile and missile-related items, materials, goods and technology being transferred to DPRK's missile or WMD programmes;
4. Requires all Member States, in accordance with their national legal authorities and legislation and consistent with international law, to exercise vigilance and prevent the procurement of missiles or missile related-items, materials, goods and technology from the DPRK, and the transfer of any financial resources in relation to DPRK's missile or WMD programmes;
5. Underlines, in particular to the DPRK, the need to show restraint and refrain from any action that might aggravate tension, and to continue to work on the resolution of non-proliferation concerns through political and diplomatic efforts;
6. Strongly urges the DPRK to return immediately to the Six-Party Talks without precondition, to work towards the expeditious implementation of 19 September 2005 Joint Statement, in particular to abandon all nuclear weapons and existing nuclear programmes, and to return at an early date to the Treaty on Non-Proliferation of Nuclear Weapons and International Atomic Energy Agency safeguards;
7. Supports the six-party talks, calls for their early resumption, and urges all the participants to intensify their efforts on the full implementation of the 19 September 2005 Joint Statement with a view to achieving the verifiable denuclearization of the Korean Peninsula in a peaceful manner and to maintaining peace and stability on the Korean Peninsula and in north-east Asia;
8. Decides to remain seized of the matter.

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Going into the fall of 2006, we had intermittent power outages, usually on warm days. Fall is harvest time and this fall's harvest was down enough to make headline news on TV. They'd missed it, but not by much. Good yields offset crop losses due to floods but couldn't replace the crops not planted in first place. About the cheapest thing in the store was coffee and it was up due to increased transportation charges. It was all about the same, be it Folgers, Maxwell House or Hills Brothers. I suppose that's why companies like Starbucks did so well. Staples, like flour and sugar were up, as was vegetable oil. Folgers had crept ahead of Maxwell House in market share. Folgers was a Procter and Gambles brand, Maxwell House, was Kraft Foods and Hills Bros. was owned by Sara Lee.

We bought 2 larger 21ft<sup>3</sup> upright freezers for our homes and put the older 17ft<sup>3</sup> freezers in the storeroom along with a trio of new 25ft<sup>3</sup> large chest type freezers we got on sale from Sears. They wanted to put it on my Sear Charge, but I didn't have one, didn't believe in them and would never have one. When Bank Americard and Mastercharge came along, the country went to hell in a handcart. Then Bank Americard became VISA but it was the same old thing, just a new name. They wanted us to accept the credit cards, but some discounted 3% and American Express 6%. No way, Jose, or whatever your name is.

The money wasn't even real anymore, it was Federal Reserve Notes and not Silver Certificates, maybe that explained why it seemed to be worth less (not worthless, yet). The money was backed by the full faith and credit by the US Government, and there was that word again, credit. You borrowed money from a bank to buy a home or for operating capital and so forth; you didn't borrow money from some corporation at a 20% interest rate. If you did, your purchase probably cost you triple.

o

"Matt, I'm about ready to retire, do you think we could just let Liz and Tom run the gun stores?"

"I'll keep my hand in Rob, they aren't gunsmiths. Maybe the twins can help out some."

"Sarah and Rachel? I don't see why not. I'm just surprised you didn't name Matt Issac or Lot."

"We named the first one after her mother and chose a similar name for the second. The boy was named after me. I suppose I could have named him Moses."

"Nah, he doesn't look a thing like Heston."

"If you are going to retire, does that mean you're going to stop carrying?"

"I've worn a firearm for so long, I'd feel naked without out it. I think I still carry the pistol and the backup, especially now."



"Why now, what's different?"

"Nothing, other than high gas prices, a looming famine and unrest in the big cities."

"Phoenix is a big city; Sedona is a small tourist trap. There for a while I thought that fire was going to get us. Didn't help business any, them closing highway 89."

"It helped, Matt, made people anxious, no sooner did they open the highway than we had a full parking lot. The fire was on the other side of the highway anyway. We aren't old."

*Fairy tales can come true  
It can happen to you if you're young at heart (young at heart)  
For it's hard, you will find  
To be narrow of mind if you're young at heart (young at heart)*

*You can go to extremes with impossible schemes  
You can laugh when your dreams fall apart at the seams  
And life gets more exciting with each passing day  
And love is either in your heart or on the way*

*Don't you know that it's worth  
Every treasure on earth to be young at heart (young at heart)  
For as rich as you are  
It's much better by far to be young at heart (young at heart)*

*And if you should survive to a hundred and five  
Look at all you'll derive out of bein' alive  
And here is the best part, you have a head start  
If you are among the very young at heart*

A word or two from old Blue Eyes on the subject of getting old.  $105 - 67 = 38$ , not bad, we're only middle aged. I don't agree on the narrow minded party, but hey, different strokes... I wasn't sure I'd want to hang around that long, things weren't good in the world. Didn't mean to mislead you with the title either, you're only as old as you feel. I'm planning on a 22<sup>nd</sup> birthday party in a few years.

We began to notice that with ten adult couples and the children we were going through food faster than we could acquire it, when they're limiting purchases it doesn't matter how much money you have. With winter coming we were hoping that the power crisis was over and they'd be able to get the systems restored over the winter and next summer wouldn't be a problem. I didn't consider ice storms in the northeast.

And like the problem with limited food, you couldn't buy fuel that wasn't available. We could get B-100, but it took a trip to Kansas to get the amount we needed. We had

9,000-gallons plus of stabilized E-85 and 500 gallons of unleaded in the old E-85 tank, but no ethanol to blend with it. Construction began in December or January on an ethanol-producing plant outside of Maricopa that would produce more than 50 million gallons of the clean-burning fuel a year. I put in a call and was told when they came on line, the E85 was be sold as a finished product. Matt immediately ordered a second 10,000 tank for E85 and we began to consider making anhydrous alcohol.

o

"I don't know about making alcohol, wouldn't it be easier just to sell off the gas and refill the tank with E85?"

"Only if they'll guarantee to sell us E85, I wouldn't want to empty the tank only to learn we couldn't refill it."

"How much E85 could we get out of the 9,000-gallons of unleaded?"

"Enough to last for a very long time; that would be enough gas to produce 60,000 gallons of E85."

"How long would it take us to burn us 18,000-gallons of unleaded?"

"10 vehicles using 5-600 gallons a year each, about 3 years I suppose."

"I guess we'd better burn it then."

"I agree. Unless we can find the alcohol to blend, I don't see any other way."

"I guess we should have thought about that before we invested nearly \$100 grand in unleaded."

"Matt a bird in hand is worth a flock in the bush."

"True. What are we going to do about our shrinking food inventory?"

"We have grinders so we can grind our own, maybe we should stock up on grain."

"Tom, talk to Miguel and find out how much corn, oats and hay we need to store. You'd better figure on a two year supply if we have room to store it. We're going to need wheat, but maybe we can get that from Walton Feed. I don't see that their food is any bargain, but it keeps for a long time. The reports we read suggested food shortages for 7 or 8 years so figure out our consumption and buy enough to carry us for that long or longer. If we have to, we can always erect another building to store it."

"How much money do we have?"

"Enough."

"Unless the price of fuel goes a lot higher."

"We still have several hundred firearms we can sell. I think our only problem will be supply," Matt volunteered.

"Ok, I'll look into it and figure out something with Miguel. We can figure out how much food we have stored; however, we're going to have another problem, security."

"Keep it as low key as you can and if you can get more get it and we'll sell some to the folks in Sedona. Do the best you can on price, because it won't be going down until yields are back to normal."

"Aren't we cutting off our nose to spite our face selling those guns to people who could turn around and use them on us?"

"If we sold all we have yes, otherwise, we have a few surprises no one knows about."

"Like what?"

"We have 4 machine guns, 2 .50 caliber and 2 .30 caliber."

"And they have the Arizona National Guard."

"It won't come to that, but if it does we're not that far from an Army Depot. Now let's not get excited and overreact. The less attention we draw to ourselves the better."

"You think people haven't noticed the new fences, the barn and the other new buildings?"

"You can't see them all from Highway 89 and we can always explain that it's a horse barn and we only have a few head of cattle. Like I said, we have to keep a low profile. I don't want to have to shoot our neighbors. How do we stand on getting those new freezers filled?"

"It's mostly ground beef. We scored 3 cases of pork loins and 2 cases of whole Cure 81 hams. Do you want me to see if Casey's can get us a couple of sides of beef?"

"Do that and see if you can get some bacon, I really want to get ahead of the curve if we can. Don't buy any Starbucks coffee unless that's all you can get, that stuff's awful. Talk to Sarah and Sue and they'll give you some ideas. Don't be afraid to go to Phoenix if that's what it takes. Anything else?"

"Gun sales?"

"Better restrict those to people we know for the time being."

o

When the stores got turkeys in ahead of Thanksgiving we bought enough to fill one freezer and to this point in time were well ahead of the curve. We took the website down figuring we'd better eliminate what advertising we were doing. We were losing customers steadily; most people were spending their money on fuel and food. For want of anything to do, Matt and I began to informally provide security. Most people wouldn't give 2 old geezers a second look.

Ahead of Thanksgiving, we asked around about families in need of help and put together boxes of food for them. With tourist business falling off, there were more than a few families who needed the help. We also asked the pastors of several of the churches in town to put together a list for Christmas and we'd do what we could.

*The day after tomorrow is generally the largest sales day of the year for retailers and officially begins the Christmas season. Retailers have indicated that sales are expected to be low, possibly setting records. With the price of gas averaging \$4.40 a gallon nationwide and soaring food prices, the amount of available money for Christmas is expected to be limited.*

*The government released another 30 million barrels from the strategic petroleum reserve an effort to check spiraling prices. Initial indications are that sufficient stocks of ethanol exist for gasohol but there is some concern that crop shortage may limit the overall availability of E85 fuel. Several new plants for ethanol production are nearing completion, many using cellulose rather than corn to produce the ethanol.*

*Efforts continue to restore sections of the national electrical grid devastated by the solar flare that resulted in cascading blackouts. The EPA temporarily lifted emission standards to insure adequate supplies of electrical power for this winter. The greatest concern is the cost of home heating oil used extensively in the northeast. After hurricane Katrina hit the Gulf Coast in 2005, there were similar concerns but a milder than expected winter resulted in sufficient supplies to meet homeowners' needs.*

*The troop draw down in Iraq continues and force estimates are 95,000 troops by years end. The Administration entered into negotiations with insurgent groups using the new Iraqi government as a go between but steadfastly declines to set a timetable on troop withdrawals.*

*Israel forces continue to occupy portions of the Gaza strip and have warned Syria and other nations supporting the Palestinians and HAMAS the occupation will continue until Israel is assured that HAMAS will not repeat it behavior of this past summer.*

*Russian special forces have tracked down and brought to justice all of the insurgents involved in the kidnapping and murder of 4 Russians in Iraq. A source who asked not to*

*be named indicated that US forces assisted the Russians in identifying the insurgents involved. President Putin thanked the White House for the assistance and stated the cooperation opens new doors for cooperation in putting down the insurgency. While Russia continues to oppose the US led invasion and occupation of Iraq, they, together with China, prevented the launch of the North Korean missile this year.*

## When We Were Young – Chapter 6

It wasn't all bad news, I guess. I like the news that Russia might help us get out of Iraq. Unless we pressured the Iraqis to take over from us, they'd never be completely ready. Coming from the other side of the coin, so to speak, the Russians could perhaps get some people's attention that refused to talk to us.

"There were 11 Iraqi insurgent groups that offered a ceasefire in exchange for various terms, most notably the guaranteed withdrawal of US and coalition forces by 2009 and the release of all prisoners currently held for insurgent activities. I would offer to negotiate with them if I were Bush, as long as the only thing not negotiable was the withdrawal." (He just reenlisted for 6 years and because of COTTAD won't be going overseas for any of those 6 years.)

George might listen to that; he seems to be mellowing, what with everything that going on here at home. He hadn't suspended Posse Comitatus or Habeas Corpus, yet. There was precedent for suspending Habeas Corpus, Lincoln had done it and the Insurrection Act had been invoked during the Rodney King Riots suspending Posse Comitatus by Bush Sr. at the request of Governor Pete Wilson. That didn't happen very often and Bush Jr. had declined to do it for New Orleans after Katrina. It was looking more like it was going to happen now if we had another outbreak of unrest (rioting) in the larger cities over food shortages.

The average American farmer fed a lot of people with what he produced. I hadn't heard a figure recently, but in good times, it may well have exceeded 100 people (155). The grain reserves were back up, but that was temporary, we wouldn't be resupplied for a full year. Between grain for livestock and grain to produce ethanol and biodiesel, I wouldn't be surprised if next year we weren't below 55 days. The USDA had issued a statement indicating that grain exports would be the lowest in years. For a really good look at the US grain exporting system, North Dakota has a report that shows the entire US system.

The problem was, you couldn't ship what you didn't grow. Worse, because of rising fuel costs, we had turned to alternative energy sources like ethanol and biodiesel, primarily made from corn and soybeans. It would be an interesting trade-off. The costs of fuel affected grain production, but shortages raised the price. The Cray is tied up at the moment so I won't try to analyze the relationship. We had exported tons of medium grain rice in previous years but with the problems associated with Katrina and fuel costs, we might not export much of the 2006 crop, if any. Those survivalists who depended on beans and rice to get them through tough times were in for a surprise unless they'd already stocked up.

However, it wasn't like they hadn't been warned. Speaking of which, the article, *This is not Fiction* was now posted on a second website curevents dot com I think some people would do anything just to get a little publicity. He didn't post it, another fella did, but he

asked for permission to post the article. The guy who wrote it is one of those beans and rice types.

"How does this work, Miguel? We have 4 calves and then what?"

"What we hope for is 2 bull calves and 2 heifers. We grow the steers to market weight and butcher them while we keep the heifers and have them inseminated or bred when they're old enough. Based on the law of averages, we should get 2 of each gender, thus growing your herd to 6 cows. If the hogs produce an average of 10-13 pigs per litter, we should be able to grow the herd to a dozen sows this year and to a full herd of 30 sows in 2 years. That will mean that we can butcher 10 pigs this year and next year we will have meat to sell on the market."

"You said our herd size would be limited, how many cattle can the land support?"

"That depends on how much grass we plant and how well it grows. If we just went with open range, we'd be lucky to be able to support one beef with 10 acres."

"Are you talking about growing hay or just having permanent pasture?"

"Considering the cost of farm equipment, I'd suggest permanent pasture and you buying the hay and livestock feed you need."

"Why did you buy 8 horses, There are only 4 of you riding, Tom, you and your two boys."

"Remounts, boss. You can't work a horse hard all day long without wearing it out."

"I don't know one horse from another, what kind of horses did you buy?"

"Quarter horses, trained as cutting horses."

"Should we have more than 8 horses?"

"Only if some of you ride. In that case, I can buy some western saddle horses for you. We won't get full value out of the horses we have until the cattle herd gets larger, but I'd rather keep these horses just for working cattle. Horses can be divided into colors and breed. For example:

Paint - breed

Arabian - breed

Quarter Horse - breed

Tennessee Walker - breed

Pinto - color

Palomino - color  
Spotted Saddle - color/gait"

"I don't ride, but maybe some of the kids do, I'll have to ask around."

o

I couldn't see learning to ride this late in life, especially since I had a Dodge Ram. If indeed we had a disaster looming, it was a slow moving disaster, not one of those 'hurry to the shelter, the missiles are coming' type of events. Information was power and when a person realized that food would be short, there were steps one could take, like planting a garden, raising livestock, etc. The same thing applied to a fuel shortage, the average motorist used maybe 600 gallons of gas a year. That one service station tank gave us a 3 year supply of gas, probably more and the diesel fuel could provide both transportation and electricity, as required.

The key to preparedness was the ability to do whatever it takes and to try and anticipate problems before they became insurmountable. It wasn't as if there weren't doomsayers out there warning us that we'd better do this or that to be ready for 'the big one', whatever form 'the big one' took. Perhaps if they said it enough times, people would listen. You see, it was never a question of 'if', it was always just a question of 'when' and 'what'. Matt and I had done our part supplying one element of what people should include in his/her preparedness supplies, a means of defense that could double as a tool to supply food.

Since the mid '80s, a whole new group of suppliers had appeared. They supplied those essentials that a person would need when 'the big one' happened. There were several companies who supplied 'bomb shelters' and others who supplied long term food storage supplies. There was even a guy in Texas who had cornered the market on radiation detection equipment, rebuilt and certified the units. Considering the ease of becoming prepared in advance, it was just a shame more people weren't. Some people didn't have enough food in their homes to get them beyond the next paycheck, but they did have a 40" TV.

There were those among us that had no idea what was happening beyond the local news, when they chose to watch it. Considering the number of news channels and informational channels cable TV had to offer, there was simply no excuse for that. One could choose from liberal, CBS and CNN, to conservative, FOX, news broadcasts so one couldn't argue that he/she didn't agree with the philosophy of the news providers. Some of the informational channels were downright interesting, ala National Geographic, Discovery, History and The Learning Channel. Most were available with basic cable service.

Preparedness didn't need to be elaborate, it could be as simple as having a few oil lamps and a few jugs of kerosene in case there was a brief power outage and as elaborate has having 360kw of reserve power and enough fuel to run the generator(s) for 3-4



months. Was it really that difficult to store a couple of drums of gas with a little PRI-G added to keep it good? A person could nearly cross the country on a couple of drums of gasoline. And he/she could run that little 2.8kw generator long enough that none of the food in the refrigerator and/or freezer would spoil. Don't forget a couple of hanks of clothesline rope to hang your clothes on to dry. You could always hand wash them in a sink or the bathtub.

"I was visiting with Miguel about our livestock and attempting to get a little background information. He said that if anyone rode, we ought to get some saddle horses rather than using those fancy horses he bought. I'd like to see a show of hands of how many of you would like to have a horse."

"Fine. Now I'd like to see a show of hands of how many of you actually know how to ride a horse."

"Matt when did you learn to ride a horse?"

"On my cousin's farm when I was a kid."

"How long has it been since you've ridden a horse?"

"About 50 years. I hadn't thought about having saddle horses, do you think it would be a good idea?"

"I have no idea; I don't know how to ride."

"We wouldn't need fancy purebred horses, Daddy, why don't we get some and learn to ride?"

"Et tu Liz?"

"Well, Daddy, this IS the not so wild, wild west, so why not? Besides, we have a barn and corral now."

"Will one horse apiece be enough, or do you all require remounts?"

"These are pleasure horses, Rob, one apiece should be enough."

"Pleasure horse? Not for me they won't be."

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And that explains how we ended up with a tractor and a manure spreader. But it wasn't all bad, that manure really made the pasture grow. It also allowed us to have gardens the following year that produced large crops. I most certainly didn't grow any Swiss Chard in the garden, whatever that is. But, we could grow onions, potatoes, green

beans, peas, sweet corn, roma and beefsteak tomatoes, hot and bell peppers, radishes, carrots, beets (chard), turnips, iceberg lettuce, melons including cantaloupe, watermelons and pumpkins, cabbage and cucumbers and hence, pickles and finally herbs. Which begat our getting into canning so we could preserve what we grew. That meant pressure canners (4 All American 30-quart), jars in jelly, pint, quart and half gallon size plus regular and wide mouth lids. The shipping, we were told, would be outrageous, but we weren't sure how many jars we'd need and planned to over buy.

Over the past years it was easier and more economical to just buy in bulk from Costco or Sam's Club or even grocery wholesalers. Unfortunately, that presumed a supply of what we needed. As it was, we couldn't produce all that we required and were still dependent on our existing supplies and the stores for the usual suspects, toilet paper, sanitary supplies, sugar, coffee, etc. Fortunately, it was a case of replacing what we used.

We were the lucky ones; we had a full storeroom to fall back on. We had fuel to travel to distant locations like Phoenix to try and buy what we needed. We had money although our supply was shrinking. That was offset in part by the rising value of gold and silver.

Sue and I hadn't really planned on some of what was happening, like becoming ranchers or having a herd of horses. To put in the garden, Miguel said we'd need a plow to turn the soil, just a small 2 bottom plow; we weren't plowing all 320 acres. Still, we fell behind the curve in making replacements. Our supply of diesel fuel began to drop until the new soybean crop came in. Food items became more difficult to replace so we concentrated on things we wouldn't replace with a garden next year.

And with business all but gone, we got the fencing contractor back and fenced the area around the buildings with chain link fence and added a heavy duty gate under the Rob's Roost sign. For all intents and purposes, we were now isolated from our surroundings.

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The Christmas boxes we planned on putting together to help out the needy in Sedona had plenty of food in them, but they were looking at meatloaf for Christmas, not a turkey or ham. We couldn't put it in the boxes if we couldn't get it and the number of boxes far exceeded our supply of turkeys and hams. It was that good 12% ground meat from Costco, though; it would make a good meatloaf. The garden was still 5 months away from planting and even longer until we had some food.

Canning Panty up in Hyrum, Utah had many of their canning supplies on sale because it was off season and we went ahead and bought what we thought we needed. 4 canners, several pallet loads of jars and enough lids for two additional years of canning. The canners were marked down from \$365 to \$240, saving us 34% each on them. They were out of stock on regular mouth canning jars and we ended up with wide mouth jars which cost more. It was probably good that we ordered when we did.

While we were at it, we bought baking supplies from Canning Pantry including commercial pans and dough enhancers. We were already grinding wheat and baking our own bread. We also decided to grow strawberries in beds around the homes, they would provide preserves and we could freeze some of them for later on. I didn't know if we'd get a crop this year or not, nor how heat tolerant the plants would be, but it was worth a try. I did some research and you pinched off the blossoms the first year.

Growers from all over the world claim their strawberries to be the best. In Wepion, Belgium, "The World Capital of Strawberries," they even have a museum dedicated solely to this sumptuous red berry. Folks in Plant City, Florida claim their town to be "The Winter Strawberry Capital of the World." Towns such as Strawberry, Arizona and Strawberry, California chose their namesake for some berry compelling reason. Strawberry Mountain is found in Oregon and Mansikkala, Finland, literally translated means "The Place of the Strawberry."

Strawberry, Arizona was 36 miles to the southeast of Sedona. If they can grow strawberries, we can, provided we could find the starts. Have you noticed how small those seeds are? I have to put on my glasses to see them. Besides, not being gardeners, there might be something to starting strawberry plant we knew nothing about.

o

Now you talk about ingrates, one guy wanted to know where the turkeys and hams were. We just apologized and told him we couldn't get any, all the while vowing under our breaths that this would be the last year we'd shared with them. It was a 5 pound package of that really good ground meat from Costco, too. Maybe next year we'll feel differently, but at the moment it was very hard to feel any charity for those people. They weren't even customers of ours; people who could afford to buy what we sold didn't need handouts. You've probably never had the experience, have you?

"Daddy, aren't you going riding?"

"Why would I want to do a darned fool thing like that?"

"What would you do if we ran out of fuel or your pickup broke down?"

"Walk."

"It's a long way to town."

"That's ok, Liz, they don't have hitching rails. Anyway, I'm not feeling very good about the people in Sedona at the moment."

"Because he wanted ham or turkey?"

"Probably because he had the gall to complain. I'll get over it but I'm sulking for a while."

"What do you want for Christmas?"

"You wouldn't happen to have an XKE with a brunette driving it would you?"

"No."

"Whatever you decide will be just fine with me, the gift is in the giving."

"Listen to you, you're angry at the people in town over the meat and in the next breath you say the gift is in the giving."

"I hate it when I do that."

"Do what?"

"Contradict myself. It frosts my butt is all. I've got it all figured out what I'm giving everyone else this Christmas."

"I'll bet I know."

"Guess."

"Cowboy guns, you don't like them anyway."

"Shoot. I thought it would be a surprise."

"You're as transparent as a pane of glass. So, who is the brunette?"

"Playmate of the month, June 1959."

"Did you say 1959?"

"Yeah, she was the model they hired when they displayed the XKE in New York."

"When was that?"

"1961."

"She's probably dead."

"No she's not, she lives in Salt Lake City and supports the performing arts."

"So, did you want the car or the girl?"

"Yep."

o

I'd still surprise her, I had it in mind to give Tom and Liz each a Marlin Model 1895 Cowboy rifle, we only had 2. The Model 1895 Cowboy was an ideal big game rifle for hunters who appreciated the nostalgia of 19th Century-style firearms. The authentically old western-styled .45-70 featured a 26" tapered octagon barrel with deep-cut Ballard-type rifling, 9-shot tubular magazine, adjustable Marble semi-buckhorn rear and Marble carbine front sight. The American black walnut stock had a straight-grip, a hard rubber butt plate and a blued steel fore-end cap. To accommodate tang sight installation, the serial number was located on the left side of the receiver. That was a hunk of gun and weighted about 8 pounds. There was a pair of New Model 7½" Super Blackhawk's that would go nicely with the .45-70 rifles. Neither the rifle nor the revolver was for the faint of heart.

The .45-70 Government cartridges put out by Winchester had a ton of muzzle energy and there was little difference between the JSP and JHP. Most of the Remington .44 magnum cartridges had 750-800ft-lb of energy, making them a good back up. It meant carrying 2 different cartridges, but it wasn't any different than what we did with the .308 and .45 ACP. I thought I saw some gun belts set up to handle 2 sizes of cartridges but if I hadn't both should fit in a .45 caliber gun belt. The belt I had in mind was the border belt made by El Paso Saddlery and had loops for both rifle and pistol cartridges. I'd have to look, we'd dumped the leather from Dave's shop into 3 or 4 boxes. I knew we had rifle scabbards, Dave had sizes for most of the rifles he carried. That had been his problem, he got carried away trying to anticipate customers' needs.

We only carried a couple of hard cases for rifles and they covered most sizes of long arms. Focused as we were on Assault weapons we didn't need many sizes and the cases could be filled with extra magazines. The only other case we carried was a drag bag, generally used by snipers, and some of the rifles already came with a case. I hope you caught the reference to Cold Steel; they were one of the only two brands we carried. The styles were limited to the Military Classic, UWK, Recon Scout and the Counter Tac I boot knife. Our only other choice was the standard issue Marine Corp Ka-Bar Knife.

We didn't have a committee vote on what we carried in the store because, "In all the town and all the cities, there are no statues to committees." It was our store and we carried what we liked, which meant we didn't carry Glocks, because we were boycotting Mattel. We were like Wal-Mart used to be, we mostly carried firearms made in America, our little political statement. The notable exceptions being H&K and FAL. The only Berettas we had were the ones Dave carried in his store, the single actions. H&K didn't make weapons for the Nazi's, they weren't formed until 1949. In fact, they started out by making sewing machines and didn't get into rifles until 1956. Many people think that H&K is the best of the best and are the preferred firearms of most special operators. They have 2 factories, one in Germany and one in the US of A.

The world is a very strange place when you think about it. In some countries, a suppressor is required for hunting. Reflex is one of the major suppressor manufacturers in the world. Unfortunately for us, Al Capone didn't live in Finland. It is the most produced rifle suppressor in the world. Patented and manufactured in Finland by BR-Tuote. Reflex Suppressors are used by Finnish hunters and home guards for shooters' noise protection. Exported to all continents. Reflex Suppressors is a well-known international trade mark introduced in magazines and literature. (T6M14 for 7.62 mm NATO M14/M1A). Remove the flashhider and screw on the suppressor. The number in the model, e.g., T6, reveals the number of baffles.

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We've always had criminals, probably since the dawn of mankind. How we chose to deal with criminality has never been particularly successful because nothing deters a sociopath. A majority of crimes are committed by persons under the influence of some drug, the most common being alcohol. When any disaster arises, they'll be there, getting theirs. Looting occurs during rioting because it's an opportunistic crime. Law enforcement is otherwise engaged trying to stop the riot, making looting possible. Then, one finds oneself splitting hairs, is taking a bottle of water looting? Sure it is, if you don't pay for it, but that's not the same as stealing a TV. Some states have laws permitting limited looting for necessities, like food and water.

Calling it strategic reallocation doesn't change what it is; it is a lame attempt to justify the action. The simple fact is that it will occur, be it right or wrong. One will usually find strategic reallocation in stories I pen because it's a fact of life. Is a Tac-50 a necessity? That might depend upon the circumstances and if the National Guard isn't there, it's open to interpretation. The basic necessities are generally defined as food, water and shelter. I've included prescriptions drugs and a means of self-defense, assuming that what one needs to defend oneself might be something more than a .22 rifle. I don't advocate it; I simply accept it as a reality. Some of the first places hit in New Orleans were gun stores, think about that. They didn't shoot rats, they shot at cops. During the Watts and Rodney King Riots, firemen required police protection.

o

We weren't worried about that, we owned the gun store and now we had a chain link fence to protect it. Christmas presents weren't limited to firearms; some of the children got German Shepherd puppies. Unlike the folks in New Orleans, we had money and didn't need to steal. We must have bought a couple of litters, every family ended up with a puppy and they weren't intended to be house pets.

"Oh Daddy, you shouldn't have," Liz said when she saw her new rifle and revolver.

"Fine, give it back and I'll sell it to someone else."

"Why a .45-70?" Tom asked.

"It was the largest caliber lever action rifle I had. We had some Winchester 1885s, but they're single shot. I sort of figured you want a lever action rifle for when you went riding."

"Thank you."

"You are very welcome. When am I going to hear the patter of little feet?"

"I'll put the puppy down, Daddy."

"You know what I meant."

"It should be in about 7 months, Rob."

"Glory be, you figured it out. By the way everyone, we have some dog houses so you won't have to keep the puppies in the house. If we're ready, let's eat. Tom you can carve. Miguel, will you say grace?"

"I usually say it in Spanish."

"That's ok, I suspect that God is bilingual."

I didn't feel a bit guilty eating turkey when all we had to pass out to the people in Sedona was ground beef. I was mildly irked, but was getting over it. Liz was right the gift was in the giving. In fact, the ground beef actually cost more than a turkey, but we'd been unable to get enough turkeys or hams leaving us little choice in the matter. I wasn't going to let one disgruntled recipient ruin it for everyone.

So far, the principal problem had been with distribution and the lack of power for processing, not the actual lack of food. However, those two things had worked together to have a significant impact on the prices of what was available. Last year after Katrina hit the Gulf Coast, some of the refineries were closed solely due to a lack of power for a time. Bad things, or so it is said, often happen in threes. If the power outage was #1 and food shortages were #2, did that make the shortage of fuel #3 or was that a part of #1? Was the unrest in the cities #3 or was that related to #1 and #2? Lots to think about.

"Pass the turkey."

"White or dark?"

"You gotta ask?"

"Pass your father the white meat, he's a leg man."

"I thought he liked brunettes."

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All in all it had been a very nice day. We had a little snow on the ground, a couple of inches, and temperature was in the high 40s or low 50s. We didn't usually get enough snow that you would use a sleigh. Overnight lows were down around freezing, not so cold that the dogs' houses wouldn't provide enough warmth for the new puppies. I don't doubt that some of them ended up spending the night in the house; you know how kids are when they get a new pet. I put a folded up blanket in our dog's new home, I assumed she'd be able to burrow in and stay warm. We planned on having the dogs neutered; there was no sense into turning the Roost into a dog ranch.

One had to realize that 6 freezers divided among 10 families didn't amount to a whole lot of storage space. Even with the freezer compartments in the refrigerators, it might not be a bad idea to watch for another sale at Sears. The average person eats 60 pounds of beef, 50 pounds of pork, 60 pounds of chicken, 15 pounds of turkey and 15 pounds of fish a year. That translated into 1,800 pounds of beef, 1,500 pounds of pork, 1,800 pounds of chicken and 750 pounds of fish. That was easily 5 sides of beef, a dozen hogs, 600 chickens and a whole lot of fish filets. We weren't really into fishing, although there was Mormon Lake over on state route 209. And, that didn't count the food we passed out at Thanksgiving and again at Christmas. Anyone know where we can get 600 fryers a year?

Even raising our own cattle, we could come up short in the future. That's one of the reasons we bought 4 steers, to get a bit of a jump on things. Having turned our 2 home ranch into a small development with a total of 10 families instead of 2, Matt and I felt we had a responsibility to make certain we didn't run low on anything. In 1929, the first year data of this type were recorded, 23.9 percent of disposable income was spent for food. This percentage has since tapered off fractionally almost every year. By 1970, the percentage had dropped to 13.8 percent. During the 1970s, the percentage held fairly constant because of high food-price inflation. By 1980, food spending was still 13.4 percent of disposable income, but has since declined steadily to reach a low of 10.7 percent in 1997.

That was for the United States. Elsewhere, food could be as much as half or more of a family's income. Food insecurity can be defined by a scale according to information I found on the web. Let me share the Howe-Devereaux framework with you:

Level 0 – Food Secure – Crude Mortality Rate (CMR) < 0.2/10,000/day and/or Wasting < 2.3% – Cohesive social system; food prices stable; Coping strategies not utilized.

Level 1 – Food insecure –  $0.2 \leq \text{CMR} < 0.5/10,000/\text{day}$  and/or  $2.3\% \leq \text{Wasting} < 10\%$  – Cohesive social system; Food prices unstable; Seasonal shortages; Reversible coping strategies taken.



Level 2 – Food crisis –  $0.5 \leq \text{CMR} < 1/10,000/\text{day}$ ,  $10\% \leq \text{Wasting} < 20\%$ , and/or prevalence of edema – Social system stressed but largely cohesive; Dramatic rise in food and basic items prices; Adaptive mechanisms begin to fail; Increase in irreversible coping strategies.

Level 3 – Famine –  $1 \leq \text{CMR} < 5/10,000/\text{day}$ ,  $20\% \leq \text{Wasting} < 40\%$ , and/or prevalence of edema – Clear signs of social breakdown; markets begin to collapse; coping strategies exhausted and survival strategies (migration in search of help, abandonment of weaker members of the community) adopted; affected population identifies food scarcity as the major societal problem.

Level 4 – Severe famine –  $5 \leq \text{CMR} < 15/10,000/\text{day}$ ,  $\text{Wasting} \geq 40\%$ , and/or prevalence of edema – Widespread social breakdown; markets close; survival strategies widespread; affected population identifies food scarcity as the major societal problem.

Level 5 – Extreme famine –  $\text{CMR} \geq 15/10,000/\text{day}$  – Complete social breakdown; widespread mortality; affected population identifies food scarcity as the major societal problem.

Various nutrition benchmarks have been proposed as the cut-off points for food insecurity levels. The UN Refugee Nutrition Information System lists a number of such indicator cutoff points:

A. Wasting - defined as less than -2 std dev in body weight, usually for children between six and 59 months:

1. 5-10% = normal in African populations in non-drought conditions
2. Greater than 20% = "serious situation"
3. Greater than 40% = "severe crisis"

B. Edema due to kwashiorkor (swollen belly) is always a "cause for concern". Kwashiorkor is a type of childhood malnutrition caused by inadequate protein intake in the presence of fairly good total calorie intake. British pediatrician Cicely D. Williams introduced the name into international scientific circles in her 1935 Lancet article. The name is derived from one of the Kwa languages of coastal Ghana and means "the one who is displaced" reflecting the development of the condition in the older child who has been weaned from the breast once a new sibling is born.

C. Crude mortality rate (CMR), number of deaths per ten thousand people in a time span:

1.  $1/10,000/\text{day}$  = "serious situation"
2. Greater than  $2/10,000/\text{day}$  = "emergency out of control"
3. Under-five mortality rate (U5MR), i.e. number of deaths of children under five years of age within a time span
4.  $2/10,000/\text{day}$  = "serious situation"

5. 4/10,000/day = "emergency out of control"

The use of these cut-offs is contentious. Some argue that a crude mortality rate of one death per ten thousand people per day is already a full-scale emergency. Others note that while most indicators are focused on children, parents will often reduce their own food consumption in favor of their children. Child malnutrition may thus be a trailing indicator, indicating non-emergency levels even after adult malnutrition has reached crisis levels. It has also been noted that malnutrition is often not directly related to food availability; malnutrition is often the result of disease or poor child-care practices, even with adequate food availability.

◦

As our country's production fell, so did our exports. The true measure of shortages in this country would be when our grain exports hit zero and a need to import arose. That excludes things that we normally import, like coffee, bananas, etc. Even before this food situation arose, we already imported beef from Argentina and Canada together with some seafood products. We imported coffee from all over the world and some countries' economies depended on our imports of things like vanilla, as was demonstrated by the New Coke vanilla crisis.

One thing that many fail to consider is what that negative balance of trade represents. It means we import more than we export, ergo, many countries' economies are dependent on us buying from them. One of our larger export categories is food grains. If we cut imports due to a lack of demand and reduce our exports due to a lack of availability where does that leave them?

◦

Worse yet, where did that leave us? Short of gas and diesel fuel for one thing, thus raising transportation costs. The supply of food was tightening due to unavailability and processing delays. At this late date, some components of the electrical grid occasionally failed. People were alert, preventing further cascading shutdowns. As food became more available in large cities, the anger remained but the rioting stopped. Not in recent memory had food consumed such a large part of disposable income, at times approaching 25%. Tempers flared when the USDA suggested that the outlook for the coming year was even worse than this year.

I seemed to recall reading that there was a possibility of reduced crops for a period of up to 7 years, oh Dear Lord. Shortly after that news came out, gun sales slipped up, but we were having trouble getting replacement M1As. Liz told Matt and me that Springfield Armory was running as much as 90 days behind in deliveries. We suggested that she place a large order and request 120 M1As and 60 XD .45s. We were hoping an order that size might get some attention. There was always Fulton Armory, but they custom built their M14s one at a time and we weren't one of their regular dealers.

We considered contacting Armalite. Their AR-10A2 could compete with M1A in price and probably accuracy plus their 20 round mags were cheaper. We figured any port in a storm and ordered 120 ea. AR-10A2s and M-15A2s and a few cases of magazines. Their AR-50 made for an affordable .50 caliber rifle although it was only a single shot and we went for 4 of those.

The only way to come out on ammo was to buy it by the pallet load. We called and order 2 pallets each of 5.56 and 7.62 and while we were at it one pallet of Talon .50 caliber reloads, ball, incendiary and tracer.

There wasn't any pill I could take to regain my youth, but I had the next best thing, my new son-in-law, Tom. Liz had kept him a secret and I believe one of the reasons she did that was to keep me from monopolizing his time. Julia had hidden Peter too, but not long enough. I wonder if he really wanted the HK91 or just did that to humor me and make a good impression. I'm glad now I made him pay for it. I had the impression that he wore his wedding ring in his nose when I wasn't looking. Bottom line, I didn't like him, but if he knew his history, I might be able live with it. That was a combination, an English teacher and a history teacher.

John and Sara used words that were a foreign language to me when they started talking about their work. They'd get engrossed in a conversation about kingdom, phylum, class, order and suborders and they were using Latin, but it was all Greek to me. I did learn that the real Raptor from Jurassic Park, was a smaller feathered creature from Mongolia and the Raptors in the movie were based on an American dinosaur much larger in size and though dangerous, not particularly smart. I believed John would use the HK91, if pressed to protect Sara. More likely she'd be protecting him; she could shoot with the best of them. Tom and John passed muster in varying degrees, but Peter made me nervous.

o

It took a while for the orders to come in. We got the ammo, in a month and the Armalite's, in 2 months and finally the Springfield's, in 3 months and only half of what we ordered. By April Fool's Day 2007 we had everything we were going to get and put the website back up and ran a sale. We marked everything up 25% and advertised it at 20% discounts. Example: a \$1,000 rifle was marked \$1,250 and discounted \$250 to \$1,000. Sales were outstanding and we cleared out most of the new inventory and half of the old inventory.

We shut the website down as soon as the sale ended and from that point on we had ammo and magazines but no weapons for sale. We went through what we had and put in a call to Ammoman who was advertising some South African belted .50BMG in 100 round belts. He had about one and a half pallets left and we bought him out. In our spare time we belted much of the 7.62 for the M1919s.

Around mid-April a fella walked in and from his haircut, I guess he was active duty, probably Army. He wanted to talk to us about some destructive devices he had come upon.

"Know what an M72 is?"

"LAW rocket."

"How about M67"

"Fragmentation grenade."

"Five cases of the first item and 10 of the second."

"How hot are they?"

"Smoking."

"Where are they?"

"Back of my pickup."

"Mind if we run a scanner over you?"

"Help yourself, I'm not wired."

"You from up the road?"

"Yep."

"How much?"

"5 grand. Cash"

"Mind if we check it out?"

"Help yourself."

He had five cartons not cases of M72s, five to the carton, three cartons to the case in sealed cartons. They had been manufactured in 2006. The M67s were packed 30 cans to the sealed case and dated the same year.

"What's the deal?"

"I'm getting out and am short on cash."

"How soon?"

"A month."

"How about belted 7.62 and another 25 of the 72s?"

"The belted isn't a problem but I don't know about the rockets."

"Have any barrels for a H2HB?"

"How many?"

"6"

"Can do, say \$400 each."

"How soon?"

"Next weekend."

"Twenty-five cases of the 7.62 and 6 barrels, we'll go 5 grand."

"Same time, same place in 7 days."

"Done. Want to count it?"

"I counted with you."

"See you next week."

"You're into hot military stuff?"

"Yeah, as soon as he leaves, let's move it to the armory in the storage room."

"What's that come out to?"

"Don't know. It's 25 LAWs and 300 hand grenades for five grand."

"I hope we don't get caught."

"Let's not push it, the stuff we bought will be hard to trace."

"I'd have asked for more of the 7.62 barrels but I doubted he'd have them."

"They're easy enough to get, want me to order some?"

"Sure, get a half dozen."

"Ok."

o

"What did you just do, Rob?"

"Bought some military hardware from a guy from Navajo Depot."

"If you get caught with stolen military property, you'll die in prison."

"They have to catch us first."

"I've never known you to resort to situational ethics before."

"We've never been in a situation like this before."

"You sound like some cheap lawyer."

"Sue, we took the stuff off the market. It's better having it than having someone use it against us."

"Why would that happen? The lights are back on, most of the time anyway. Some food is getting to the stores and we can still buy fuel."

"Why? I'm tempted to ask why not. Listen to yourself, partial power, some food and fuel, if you can afford it. There are a lot of people in this country that live from paycheck to paycheck. How are they getting along? Their incomes are down and the prices are up. We've sold more guns since the first of the year than we did in the two previous years. People are getting ready for something and Matt and I agree that it won't be good."

"What?"

"We have no idea, but we're becoming a country with two classes, the haves and the have-nots."

"We're more politically divided than we've been since the Civil War," she suggested.

"You noticed it too?"

"Well yes, people are moving to communities where people are more like minded, changing into political enclaves where the thinking becomes more extreme as people feed each other's thoughts."

"Personally, I like the idea of the kids moving back home. Spread out like they were, if something really, really bad happened they wouldn't have much support and would have been on the road trying to get here. I sure wish Julia had been more careful who she picked to marry, Peter makes me nervous."

"He seems to belong more in the other political camp."

"Yeah, he wanted a HK91 of all things, but I'm not sure I've seen him shoot it."

"I'll talk to Julia and tell her we're concerned."

"Don't drive her away, not with the way things are now."

"You neatly changed the subject, what about the military hardware?"

"We have more coming, barrels and ammo."

"I'll visit you down at the prison west of Phoenix."

"They might put me in the one at Winslow."

o

I wasn't particularly worried, as long as we didn't make it a habit to buy stuff from this guy. He didn't offer a name and we didn't ask, I was hoping for plausible deniability. It would be better if no one beyond Matt and I, Sue and Sarah knew about this. We might include Liz and Tom, but only if they agreed not to mention it to the others. We didn't have any practice grenades so there was no use trying to train anyone. At least 4 of us knew how to use grenades so we'd just need to get by.

He was back the following week and had a bit of a surprise. Not only did he have what we asked for, he had 5 more cartons of LAW rockets. He wanted 9,000 grand for the whole shooting match and wasn't in a mood to negotiate. Better we should have them, than have them used against us, I counted out 10 Ben Franklins from a full pack and handed him the bundle. He didn't count it; he just nodded and began unloading the pickup.

"Need some help?"

"Thanks, Tom, put it all in the underground storage armory."

"You could fight quite a war with this stuff."

"I was going to tell Liz and you anyway, you don't know the half of it; this makes 10 cartons of LAWs, 10 cases of grenades and 50 cans of 7.62 plus the spare barrels for the

Ma Deuce. We ordered spare barrels for the air cooled Browning 30's while we were at it. Don't say anything about this except to Liz, I don't want it getting around."

"What was that you got from Ammoman?"

"South African belted .50BMG. It has the right links for the M2HB. We have some of the Talon reloads, so we have most of the bases covered on .50 cal."

"Most?"

"Don't have any AP."

"Is the Talon belted or loose?"

"Loose."

"Have a linker?"

"Yes, one of those USGI M12 hand linkers."

"Links?"

"A couple of boxes full."

"Want me to link some 4 to 1 mix?"

"You could, use ball plus tracer or ball plus incendiary, we can tell by the tip color what it is. Tracers are brown/maroon, incendiary is blue and AP is black or oh, never mind, you know this don't you?"

"Sure do. I have a chart somewhere. Why don't you buy AP bullets and load your own AP?"

"Why do that when it has already been done for us? I know where we can buy loaded cartridges, ready to link."

"Get some and I'll link them. Can you get AP, API and APIT?"

"All of them, what do you think."

"Maybe some special belts with a rotation of AP, B, API, B and APIT. That would give us 60% AP, 40% incendiary and the normal single tracer round." (B=ball)

"That would handle anything that standard AP/APIT is used against, but I doubt we'll need many belts. I'll get 200 rounds each of API and APIT and 400 rounds of AP. We can make up 10 100-round belts. We'll have to check the South African, I think it's all



ball and we can convert it to 4 to 1. With as much of that as we have, we have enough for some practice sessions."

"Where did you find the 7.62 barrels for the 1919?"

"Northridge International in Northridge, California, \$80 each. They had barrel bags too. Back before California and Los Angeles County got nasty, that was one of three places that sold assault rifles by the truckload. They must have been burned by someone, they're pretty hard to deal with these days. Another good store for assault weapons was B & B Guns in North Hollywood, but they're gone too. LA County put most of them out of business. Surefire Suppressors are made in Fountain Valley, that's Orange County. They're hard to sell due to the price."

## When We Were Young – Chapter 7

"Who makes the can for the USP?"

"Knight Armaments, I think it's a piece of junk, but Surefire only makes cans for rifles, so far. If Knight used the metal Surefire uses their can would be a lot better."

"That's the last of it Rob, I'd better get back to the store."

"Thanks for the help; like I said don't tell anyone other than Liz."

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I would have been more than happy if we never fired the machine guns in anger, but this situation was deteriorating. We rented a U-Haul and headed to Phoenix to fill in what we used and came back with less than half a truckload. They simply didn't have the food and rationing was beginning to be employed. Thank God we'd have a garden in next month. The application of manure had turned the soil into a sandy loam loaded with organic matter, which would eventually become humus. Once establish, humus would last for years, with the additional manure composting and enriching the soil. Dumb farmer indeed. But I wasn't sure I was ready to learn to ride a horse, no matter how tame Miguel claimed it was.

Our future seemed secure for now, regardless of what came down the pike; I hoped I wasn't being over confident. I don't believe we were breaking any laws because our private militia wasn't a paid militia and it was small enough to escape attention. Matt said we'd received an announcement from ATF stating that for the interim, NFA weapon sales were banned except to law enforcement and military. We filed the necessary report listing our inventory and closed up the class III shop, for the interim.

For as long as I could remember, I imagined us hunkered down in the shelter, waiting for the radiation to decay; if there were an all-out attack, Flagstaff could get hit. I never imagined the property fenced in and having livestock. Six-hundred chickens? They come about 50 to the case, packed in ice, when you could find them. If we could grow 600 chickens, it would take a week just to pluck them and word was it was a nasty chore. I calculated the amount of chicken based on 60lb per person and 30 people equaling 1,800 pounds and an average weight of 3lb, thus 600 chickens.

Our country was the land of abundance, we exported food. To find ourselves on the other side of the coin was uncomfortable. The announcer on the TV said electricity was less of a problem, thus processing was available again. In response to food shortages, farmers have traditionally increased herds and flocks and gotten caught when the market became glutted. Most of that livestock eats grain and if the grain crop were down or diverted to ethanol and biodiesel, we could find ourselves caught in Catch-22.

o

"They're hurting in Sedona; the tourist business is way down."

"It probably won't pick up again until the price of gas comes down; oil is pushing \$90 a barrel."

"That much?"

"I'm 90% right, I predicted \$100 a barrel."

"We're looking at \$5 gas."

"Or, close to it. Why doesn't Bush just mandate that all cars and trucks are Flexible Fuel Vehicles? Those can run on gas, gasohol and all the way up to E85."

"He's mostly a lame duck President at this point; I don't believe he'll do that. Besides, we don't have enough grain and will have to produce ethanol from something else. If we're short of food, they'll be diverting that grain to growing livestock."

"Do we have enough feed on hand?"

"I told them to get a 2 year supply."

"Will that be enough?"

"I don't know, but, it's a start."

"We're going to need another building to protect the feed."

"What did you have in mind, Miguel?"

"A pole building, covered with galvanized metal. I found a place on the internet that sells kits."

"Are you suggesting we build it ourselves?"

"Either that or hire some folks from town, unemployment is up."

"How much?"

"Five thousand plus shipping."

"Dirt floor?"

"Sure, we can use pallets."

"How big is it?"

"30'x40'x8' walls."

"They make 'em higher?"

"Didn't give a price, but yes, they do."

"How high?"

"14'."

"Order a 30'x40'x14', Miguel, we might as well get the use of the roof. Either hire some folks to assemble it or get a contractor. I'm not going to climb any damned ladders."

I had to think about that, a pallet wasn't stacked all that high. Maybe we could stack the pallets on top of pallets, but that meant we'd need a forklift. Why the hell not, we had 10 families instead of 2, livestock, fences and a perpetual supply of manure to enrich the soil. Plus with prices rising, the value of our gold holdings was going up. At Christmas time, we'd filled our little compound with German Shepherd puppies and one of these days, no one would dare come in without an invitation. Which reminded me, I'd better load up on Dog Chow.

o

School was out for the summer and the garden was planted. Miguel had turned the soil earlier and we'd walked behind a tiller until we had a smooth seed bed. It was a big garden set up to use the tiller to weed between the rows. We didn't plant much iceberg lettuce; we weren't sure how to store it. Maybe vacuum packed in the fruit cellar, but I couldn't find anything on the net to suggest how to preserve it. It said it couldn't be canned or frozen. Traditional methods of storing foods often included a root cellar, sand boxes and canning, freezing and dehydration.

One way to freeze large quantities of foods was to build an ice house and during the middle of winter, harvest ice from frozen lakes. Which was fine if you lived up north, but the coldest month of the year was January in Sedona and most of the time the temperature was above freezing. Here, we'd need a walk in freezer; it was the equivalent of an ice house. We didn't need one at the moment, but it was something to think about.

Matt's underground storage was nothing more than a very large root cellar with 12,800ft<sup>3</sup> of storage. I occasionally wondered if he had planned it that way. He must have, the door was thick and insulated, just not a blast door. On paper, at least, we could have stored 387 one year supplies of food from Walton Feed, enough food for 30 people for 13 years.

We had, however, begun to store food before we knew about them, using the same methods they used to store wheat, beans and rice – pickle pails with oxygen absorbers. We had experimented with flour, but it didn't keep that well. Salt and sugar was ok as long as you added something to keep it dehydrated. Yeast would keep frozen forever if blended with 25% water and 25% glycerin.

A 30-quart American canner would hold 19 pints or 14 quarts, essentially a double batch when compared to the regular pressure canner most people had. We had 4 and could do 56 quarts or 76 pints at a time and we had the Ball Book for a canning guide.

We had holes in our supplies, mostly food items that had become scarce. We could grow most of these and over planted the garden, forcing us to find more jars. We called Canning Pantry and inquired about more of the jars. They had them in stock, but shipping costs would be prohibitive. Hyrum, Utah is north of Salt Lake City and we rented a 24' U-Haul plus a 12' open trailer. It was a perfect task for 2 68-year-old men. It turned out to be 536 miles, one-way. We took 89 up to Utah route 20 and that to I-15. The guy who used to sell the popcorn in Beaver wasn't there anymore and nobody had heard of him. We saw the sign for Draper east on the road we exited on but we didn't go see USS, they didn't have what we wanted. We packed all the jars we could haul inside the truck and 6' high on the trailer. They didn't seem to be impressed that we paid cash.

On the way back home, we noticed the exit for Payson. We were running late and didn't stop. We wanted to make it a one-day round-trip and get home before anything happened. What could happen? We didn't really know, but didn't like being that far from home. We now had enough jars to finish our canning. You realize that 56 quarts at a time was nearly 5 cases, don't you? We had been stretching our supply of jars by blanching and freezing the peas, canned peas aren't nearly as good as fresh frozen peas. We could have dried them too.

Freezing Beans: Blanch clean prepared beans in boiling water for three minutes per pound of beans. Cool immediately in cold water. Drain. Pack into containers or freezer bags leaving some room at the top. Seal and freeze.

Storing Tomatoes: Stewed tomatoes, put up fresh from the garden, are the very best way to get flavorful cooking tomatoes throughout the winter. And, while you can freeze whole or peeled tomatoes for cooking during the winter, the taste and texture are not as good as canned tomatoes. Of course, tomato sauce freezes beautifully.

Freezing Peas: Peas should be picked and preserved within as short a period of time as possible. Shell and wash peas. Blanch in boiling water for 1½ minutes. Submerge in ice-cold water immediately and drain. Pack peas into freezer containers. Seal and freeze.

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The Declaration of Independence was approved on a Thursday, in case you've wondered. On July 2, 1776 the Congress voted to declare independence from England. After two days of debate and some changes to the document, on July 4th, the Congress voted to accept the Declaration of Independence. This is why we celebrate July 4th as Independence Day. The Declaration of Independence was approved by the Second Continental Congress on July 4<sup>th</sup> 1776, but it was not signed until almost a month later. The Congress did not have the approval of all 13 colonies until July 9<sup>th</sup>. On July 19<sup>th</sup> Congress ordered that an official copy of the document be created. The order called for hand written ornamental script to be used on parchment paper with the title "The unanimous declaration of the thirteen United States of America". Using a quill pen, this took some time to finish. Therefore the actual signing finally took place on August 2<sup>nd</sup>. POP, went my balloon. After you spend an hour figuring something out, it's disappointing to learn you were wrong. The actual signing occurred on a Friday 4 weeks and 1 day later.

After that, we had to win the Revolutionary War. The Treaty of Paris of 1783, signed on September 3, 1783, and ratified by the US Congress on January 14, 1784, formally ended the American Revolutionary War between the Kingdom of Great Britain and the Thirteen Colonies in North America that had rebelled against British rule in 1776. Congress on September 28, 1787, after some debate, decided to submit the Constitution to the States for action. It made no recommendation for or against adoption. Eleven States having thus ratified the Constitution, North Carolina added her ratification on November 21, 1789. Rhode Island did not ratify until May 29, 1790; the Continental Congress – which still functioned at irregular intervals – passed a resolution on September 13, 1788, to put the new Constitution into operation.

The Constitution has been amended 27 times since 1789, and it is likely to be further revised in the future. The most sweeping changes occurred within two years of its adoption. In that period, ten amendments, known collectively as the Bill of Rights, were added. Congress approved these amendments as a block in September 1789 and eleven states had ratified them by the end of 1791.

The colonists, for example, claimed the right "to life, liberty, and property", "the rights, liberties, and immunities of free and natural-born subjects within the realm of England"; the right to participate in legislative councils; "the great and inestimable privilege of being tried by their peers of the vicinage, according to the course of [the common law of England]"; "the immunities and privileges granted and confirmed to them by royal charters, or secured by their several codes of provincial laws"; "a right peaceably to assemble, consider of their grievances, and petition the king." They further declared that the keeping of a standing army in the colonies in time of peace without the consent of the colony in which the army was kept was "against law"; that it was "indispensably necessary to good government, and rendered essential by the English constitution, that the constituent branches of the legislature be independent of each other"; that certain acts of Parliament in contravention of the foregoing principles were "infringement and violations of the rights of the colonists."

The United States is the most famous Constitutional Republican Democracy, although, depending on which party has the most control, it fluctuates from leaning to slightly more democratic (people or state run) to being slightly more republican (central government run) which is why each of the 2 main parties refer to themselves in such a way. Though it may be sometimes slightly less centrally led, it remains a Constitutional Republican Democracy.

◦

The reason I mentioned that was it was Independence Day, 2007, a Wednesday. We only had one case of beer, more than enough for this crowd. I think the coffee on this particular day was Hills Bros. I would have thought Sue would have opened a can of Folgers to celebrate the holiday, but the Hills Bros. was already open. That was a sign of the times; not being able to choose the brand of coffee you drank. Cigarettes were easier, the tobacco was grown in the US. They were only \$40 a carton on the Res.

Sin tax is a euphemism for a tax specifically levied on certain generally socially – proscribed goods – usually alcohol and tobacco. Sin taxes are often enacted for special projects – American cities and counties have used them to pay for stadiums – when increasing income or property taxes would be politically unviable.

Some jurisdictions have also levied taxes on illegal drugs. Whether this actually qualifies as a sin tax is rather questionable, since such taxes are generally intended to create an additional punishment for trading, possession or consumption of illegal drugs rather than to raise revenue.

Such taxes have historically triggered rampant smuggling and flourishing black markets, especially if they create large differences in the price of popular products in neighboring jurisdictions.

A Pigovian tax is a tax levied to correct the negative externalities of a market activity. For instance, a Pigovian tax may be levied on producers who pollute the environment to encourage them to reduce pollution, and to provide revenue which may be used to counteract the negative effects of the pollution. Certain types of Pigovian taxes are sometimes referred to as sin taxes, for example taxes on alcohol and cigarettes.

◦

If that was the case, what was the \$200 tax on NFA weapons? A crying shame, if you ask me. You couldn't sell a NFA weapon until the government issued the stamp and they hadn't done so for the better part of a year. This was still the interim. All they had done was neatly sidestepped the trade in NFA weapons. That had started 21 years before with the FOPA. It was about time to get out of the business, permanently. We were going to do that just as soon as we could figure out how to do that and keep all of our NFA weapons. Unfortunately, we couldn't transfer them to the corporation without the stamps and were, therefore, caught between the rock and the hard spot. The corpora-

tion didn't qualify as either law enforcement or military. Fortunately, the machineguns were in the name of the corporation and the weapons we bought from the GI weren't in anyone's name. We could, of course, test fire the NFA weapons, if the need arose.

Is it an issue? It is if you're going out of your way to obey the law so nobody finds \$14,000 worth of indiscretions. It wasn't bad enough that we bought the stuff off the guy when he walked in the door, we'd placed an order. If he were caught and decided to give us up in a plea bargain, we'd attract too much attention, even though they wouldn't find anything he supposedly sold us. We'd moved them and only Matt and I knew where the things were. Furthermore, in recent months we'd spent a ton of money and no kind of audit would be sufficiently revealing, as in the case of a net worth audit, the IRS was famous for. Commingling personal and corporate funds sometimes happens when you're a subchapter S corporation and your partner is a silent partner.

In some countries they keep 2 sets of books, the real ones and the set for the government. South Korea, for example, descends on a business and locks it up tight. No one can enter or leave without being searched. The real books are never kept on the premises; rather they're in someone's garage or whatever. I know about these things...

o

"No ribs this year?"

"We thought hamburgers and hot dogs might be a treat. It's been a while since we've had any."

"Want a beer?"

"Why not, it's pretty warm out. We screwed up, Matt, we went right by Utah Shelter Systems and didn't buy any spare filters for our LUWA systems."

"Why didn't you say anything?"

"We were almost to Beaver by the time it occurred to me."

"We can always call them and order some."

"No we can't."

Why not?"

"That makes too much sense. Besides, we haven't used the ones we have."

"That doesn't mean we shouldn't have spares. We need 2 filters for a PA-300 and one for a PA-150, right?"



"Right, how much do you figure?"

"Shouldn't be over \$1,200, I say we get them and store them."

"Aren't you taking this preparedness business to extremes?"

"How is it possible to be over prepared?"

"By buying things you can't possibly need, Rob."

"And you believe that having spare gas filters for the Andair units go over the line?"

"I don't know, but if you're buying those, buy spare carbon dioxide filters too."

"What about carbon monoxide?"

"That's why we have the scrubbers. Are we going to be good neighbors and let other people into the shelters if we need to use them?"

"Republicans or Democrats?"

"What kind of question is that?"

"Most Dems are liberals and liberals seem to have the attitude that whoever is in charge owes them something."

"Rob, the older you become the more cantankerous you become."

"I suppose we could make room for in-laws, but that's about as far as I'm willing to go."

"Want another beer?"

"Isn't the food ready?"

"Not for a while, they're waiting for the salads to finish chilling."

"They should have made those yesterday."

"They were busy canning."

"Canning what?"

"Strawberry preserves."

"Ok, one more, but I have to do the cooking; I don't want to get loaded."

o

The one thing we hadn't counted on was an epidemic. We had all of our vaccinations updated and all had the two required flu shots for the H5N1. In addition, we had a supply of Tamiflu and multiple antibiotics. There was more information stored on the computer than we could ever use. Tom was CLS trained and that was the limit of our medical training. At this very moment, an engineered virus was being introduced in several large cities simultaneously. That night, we caught the first hint on the evening news.

*CDC had announced an outbreak of an unidentified illness in several metropolitan areas. Early indications are that the illness is some sort of virus. The first cases were traced back to a food distribution center in Detroit. Initial recommendations are to avoid contact with anyone who may have recently gotten food from one of the federal distribution centers. The centers which have been established throughout the country may in fact have been subject to a terrorist attack, but until the exact virus is identified, the CDC has order the center closed. Centers in Arizona are in Tucson, Phoenix, Mesa, Prescott, Flagstaff, Show Low and on the reservations. As of this time, no cases have been reported in Arizona.*

"And baby makes 3."

"What?"

"Food shortages, high fuel prices and now this, I'd say that this is our third disaster."

"What do you want to do Rob?"

"Lock it down, nobody in or out. If it's a virus and not a bacterial infection, antibiotics won't do us any good. Our only recourse is isolation, perhaps for as long as 30 days. A virus can't live outside of a host for an extended period of time."

"What about the livestock?"

"Keep them close to the barn; airborne viruses can't travel very far. Damn, I wish those dogs were a year older. We also need to get that building finished and the feed for the livestock stored."

"It's nearly done, if we all pitch in, we can finish it less than a week."

"Good. Tom would Liz and you make sure the arms are passed out. I'll have to show you where we moved our recent purchases."

"Do you want us to pass out everything?"

"Matt, what do you think?"

"We might as well, we're only going to get one chance if trouble comes looking."

o

Tom set up 4 fighting positions for the machine guns, making sure they had ammo and a spare barrel for the gun. He wasn't familiar with the old M1919A4, but assumed it might need to be head spaced and timed after the new barrel went in, just like the Ma Deuce. He'd have to ask Matt about that. Maybe Matt had an old Field Manual they could read concerning the weapon. If it did, not doubt there was some tool they needed to do that. Guns with preset headspace were a more recent development.

By pre-positioning the weapons and ammo, they could cut the crew on each gun to a gunner and one assistant instead of a gunner and 2 assistants. Being assistant gunners on the 1919A4s would be a good job for Miguel's two boys. At the moment, Tom had them filling sandbags for the fighting positions.

"Matt do you have the gages for the M1919A4?"

"Those and combo tools. I have the FM on the guns, but I'll have to look for it. They aren't much different from their big sister, the Ma Deuce, you swap the barrels between cans of ammo. Did you set up interlocking field of fire?"

"It will be a reach with only 4 guns, but there is some overlap."

"I think we ought to put in extra foxholes where we can store more rockets, grenades and ammo. Did you have any trouble finding the stuff?"

"It was right where you said it would be, in the hole under the plywood. I didn't know you had put in that storage place."

"Rob and I decided to move the stuff we got from that GI in case he got caught and decided to give us up. There's no way to trace the money and without the stuff, it's just his word against ours."

"Any word on the virus?"

"TV guy said it appears to be related to SARS, it's the same unidentified coronavirus. Incubation period runs from 2-7 days, but can reach 2 weeks so we'll lockdown until August. We have some of the disposable N-100 masks in the storage room. If I recall correctly, SARS is spread by close contact."

"When was that outbreak?"

"2002-2003; there were a few cases reported in China in 2004. We're remote enough we'll be ok if we take a few common sense precautions. There's no vaccine as far as I know since the virus is unidentified. Oh, here's that Field Manual. Make sure whoever

you put on those guns reads it carefully and does some practice sessions on changing barrels in those guns."

"You think we'll need them?"

"Probably not. Never know, so it's better safe than sorry. Be sure to cover them with a tarp in case it rains. 'Sides, there's no need to advertise we have them set up."

o

"Liz, let's go spend some time on the range."

"I'll get my rifle, be right with you... Ok let's go. What have you been doing?"

"Setting up the fighting positions for the machine guns."

"Tom, we only have 10 families and 2 teenagers who can fight, should it come to that. That's 11 teams of 2. With us on the sniper rifles and 4 teams on the machine guns, doesn't that leave us shorthanded?"

"Not if everyone pulls his weigh. Did you talk to Juls about Peter?"

"She say when the chips are down, he'll pull his own weight."

"What do you think?"

"I think he bought that HK91 from Daddy to just get on his good side."

"Does your father know?"

"I think he suspects as much."

"Would you mind terribly if I asked him to team with me as my observer and your sister team with you as your observer?"

"What do you have in mind?"

"A little training exercise, I'll explain it to your father."

o

"...so you see, it's an adaptation of SERE (Survive, Evade, Resist, Escape) training. Don't make it too far, 30 miles or so should do. We'll take 2 canteens of water and 3 MREs, which under normal circumstances would be more than enough to get us back home."

"Live ammo?"

"It has to be realistic if it's to work. Liz and Julia can provide harassing fire from a safe distance."

"It's just a shame we don't have a couple of belts of blanks for one of the machineguns. I like it, either you'll make a man of him or Julia will see him for what he really is. It's going to be hot out in that desert, are you sure you'll be ok?"

The DOD teaches the SERE Level-C training course to soldiers who are in a high-risk-of-capture category, which includes Special Forces, Rangers and aviators. The course is designed to give students the skill to survive and evade capture or, if captured, to resist interrogation or exploitation and plan their escape. The course includes a classroom phase, a field phase and a resistance training laboratory which simulates the environment of a prisoner-of-war compound. I passed the class."

o

"Peter, we're going to team you up with Tom as your observer. Julia will team with Liz as her observer. To get you familiar with the tasks involved, we're going to run a training scenario. We'll drop the 2 of you a few miles from home in the desert and it will be your responsibility to get back home, taking out any enemy combatants you find along the way."

"But we'll have food and water, right?"

"Enough so you can get home safely. We're giving you live ammo because we've just heard that there might be some escaped prisoners from the prison at Winslow out there somewhere. Your mission will be to figure out where you are and get back home as soon as possible."

o

"What escaped prisoners from Winslow?"

"That will be Liz and Julia. Peter will probably assume we dropped them off east of here because of the escaped prisoner comment."

"Where are you dropping them off?"

"In the Prescott National Forest, just east of Perkinsville to the west of here."

"I have some blanks for the M1919A4."

"You do? I didn't know that, Matt. Good, this is going to be better than I thought. They're going to have forest and desert between here and there, this ought to be interesting."

"Will they be ok?"

"Tom has a radio in his fanny pack; he can call Liz if they have a real problem."

"It seems like a dirty trick to me, Rob."

"Matt, we only have 22 people to defend the ranch; we need to be able to count on everyone."

o

"Ok, grab your gear and get out. See you back at home."

"Tom, do you have any idea where we are?"

"About 30 miles from home."

"Which direction?"

"We won't know that until the sun comes up and we can match landmarks to the map."

"I think the ranch is west of here."

"Why do you think that?"

"Something they said about escaped prisoners."

"Rob could have said that just to throw us off. Is your weapon loaded? I could be wrong about those escaped prisoners. We'll wait for sunrise, which will give us our directions."

"What kind of map do you have?"

"A topographical map."

"Ok. The sun is up and east is in that direction. Do you see a lake, Pete?"

"Peter. No, I don't see a lake, why?"

"Pete, if we were east of Sedona, you could see a lake named Mormon Lake near us. I'd say we're west of Sedona, right about here."

"Peter. Yes, the location fits."

"Let's go, Petey, to the east and take it easy on the water."

"Peter. I'm thirsty."

"You only have 2 canteens and I don't see any water, Petey."

"Ok, Pete."

About two hours later and 4 miles to the east...

"Ok, Pete, take 5 and let's have a snack."

"It's getting warm, Tom. I may be a little out of shape."

Crack...ping

"Get your head down. I guess I was wrong about those prisoners, but I'm right on our location, lock and load."

"Were they shooting at us?"

"Do you see anyone else? You're the observer; you'd better get to observing."

I got Liz's model 70 out of the drag case and had a look around. It didn't take me that long to spot the girls or that big model Tac-50 rifle. Liz was waving at me and Julia was watching us through the spotting scope and giving me a thumbs down. Pete didn't have a clue and the girls were only about 500 meters out. They should have had a red flag to help Pete.

"See anyone, Tom?"

"No, did you?"

"Un-un."

"Keep your head down and let's keep moving. This is really going to slow us down."

We moved another couple of miles to the east and one of the M1919A4s opened up. I didn't hear any pings, so they were using blanks. I assumed it was Rob and Matt.

"Pete, they after us and have a machine gun, see if you can spot them."

"I can't see anybody."

"Well look, for crying out loud, whoever it is can't be that far away if they can see us to shoot at us."

"I don't see anybody."

"Ok, it's about noon, get up under those rocks and let's have lunch."

"Don't you want to keep moving?"

"Not if you can't spot them, no."

"Do you eat these cold?"

"I guess so, I don't see any warming pouches."

"Chicken Tetrazzini, yuck."

"That's what I have too, it's not bad."

"Is this all the TP they put in the package?"

"What did you expect, a roll?"

"Excuse me."

"Don't let a snake bite you on the butt."

o

It was slow going, we made 12 miles that first day. According to my calculations, that was ½ way. We hadn't had any more surprises, but I was sure the girls were planning something. I was eating light because it was fairly warm out. I also nursed my water supply; it wouldn't look good if I ran out. The country simply wasn't all that rough and we could have made it most of the way home if Pete had been in better shape. I decided that the benefits of moving at night were outweighed by Pete's inexperience; I didn't want to have to deal with a broken leg.

"We'll run guard shifts tonight, Pete; you can go first and wake me up at midnight."

"What do I do?"

"Observe. See if you can find those guys who were after us earlier."

I'd seen the girls; they were about 600 meters ahead of us. I pretty much expected that Liz would periodically pop off a round in our general direction just to get our attention. There was a large rock about 10 meters away that I would use if I were in her position. If she hit it with a frangible round Rob had gotten from Watson's Weapons, the round would just shatter.

Crack... ping.



"Take cover, we're under fire, Tom."

"They can't see us Pete, that's just harassing fire."

"What if they have night vision?"

"Maybe they do, don't move around. Wake me at midnight."

Crack... ping.

Crack... ping.

Crack... ping.

"You can wake up now and go to sleep Pete, I'll take over for now."

The way Pete handled that weapon was enough to make anyone nervous. He had no sense of the direction his muzzle was pointing and I had to show him the safety. Once I took over, I waited for the next harassing round and then blinked my flashlight so Liz could get some sleep. I planned to spend the remainder of the way home teaching Pete the finer points of that weapon he was carrying and the day after we got home, he was going on the range until he could actually shoot it.

He was developing limited situational awareness, at least he presumed we were under attack by those supposedly escaped convicts and they apparently had it in for us. When this lesson was over, I was getting Liz back and Julia could finish polishing him up or shine him off. I had Liz's model 70, because there was no reason for me to carry that heavy Tac-50 for nearly 30 miles across the desert when the girls were driving. I could see why she liked the rifle; it was relatively light, accurate and had a darned good scope.

o

Crack... ping.

That was our wake up call. I got out a heat tab and heated some water for a cup of instant coffee. Then I broke into the 2<sup>nd</sup> MRE and ate the cookies. I lit a second heat tab and heated water for Pete, who wanted to know which was the breakfast MRE. He was referring to a cheese omelet, 2005 production. We had those entrees back at the ranch which was about 12 miles from where we were.

"You don't really know how to use that rifle, do you Pete?"

"Not really, no."

"Did Julia speak to you about it?"

"Yes, but I'm not really into guns."

"And yet you bought a \$2,500 rifle from Rob for what, \$750?"

"That's right."

"I believe that he's not pleased with you. Tomorrow, we're going to the range and you're going to learn to use that firearm."

"Do I have to?"

"Only if you intend to stay married to Julia. All 3 of the sisters can shoot and shoot well. John's a Paleontologist and he's learned proficiency with a weapon. Rob gave him one and offered me one. I went for the Tac-50 rifle instead."

"That cannon?"

"I can reach out over a mile with that rifle and touch someone. While the rifle is rated as effective out to 1,800 meters, I've made shots at 2,000 meters or about 1.25 miles. We generally use the Norwegian Raufoss Mk 211 rounds."

"Is there a silencer on the rifle?"

"Jet titanium suppressor. They sell for \$2,500. Time to move out."

o

The girls must have gotten tired of playing; we made it back to the ranch in 5 hours. I was tired and Pete was exhausted. He said he'd see me on the range tomorrow. I told him to be sure and tell Julia. He didn't say anything but his limp suggested he must have developed blisters from ill-fitting boots or wearing the wrong socks. Being aware of what makes a good fit in your shoes, the best socks to wear, and how to avoid and treat common foot problems can help you enjoy walking more. Each walker needs to find what combination of shoes, socks, insoles, and foot care works for them. Everything you put on or around your foot becomes related to how well your foot functions.

When I turned out at 8 the next morning, Pete was already on the range, waiting. To make it easier for him, I brought a HK91 too. We started out with disassembly, cleaning and reassembly. Then I put up some silhouettes at 100 meters and we started. Routine protocol would have been to start with a 6" bull to allow sighting the rifle. Instead, I had Pete call his shots and noted the impact. This rifle had already been sighted in and only required a minor adjustment. When we thought it was correctly sighted, I tried it calling my shots with Pete observing. It was right on. The rifle I brought was sighted in so we moved the target back to 200 meters and continued the practice. He wasn't doing badly

and we called it a day. I told him to take a day off to rest his shoulder and we'd resume in two or three days.

Having never shot a rifle before, Pete was easy to teach, he didn't have any bad habits to unlearn although the second time we went out, he was flinching from a very sore shoulder. I gave him a padded shooting jacket and it helped but we quit early. I told him we'd resume Monday and to wear the shooting jacket for a while.

o

Tom kept you filled in on their little adventure but he didn't tell you everything. They had heaters for their MREs, but Pete tore his rendering it unusable. Rather than say anything, Tom decided they'd just eat cold MREs. I'm sure Julia set Pete straight and if they found themselves in the boonies living on MREs again, they'd be eating hot food. Once we cracked his shell, he wasn't a half bad fella and we called him Peter as he preferred because he'd finally shown some backbone. Proof positive had been him not complaining about his feet which took about 2 weeks to heal up and the fact he hadn't tried to mooch water when he ran out early on the second day.

*My fellow Americans,*

*I come to you tonight with a message of importance concerning our food and fuel supplies. Despite near record yields of some crops, others had lower yields either due to drought or an inability to plant. While we have enough food to feed our nation, problems in the supply chain may cause regional shortages.*

*We overcame our electrical woes of this past year and have the power to process the crop as it is harvested. However, we may experience transportation difficulties due to two things, First, Venezuela had declared a cap on shipment of fuels to this country; second several fields throughout the world have passed peak production meaning production is slowly being reduced.*

*On the 24<sup>th</sup> of May, last year, I announced my energy initiative. To date virtually nothing has been done to implement that plan. As long as environmentalists block production of our existing reserves, as long as environmentalists block nuclear energy initiatives and as long as the automotive industry ignores calls for more fuel efficient and alternative fueled vehicles, the problem will remain.*

*Corn and soybeans are a limited source of renewable energy as there is insufficient arable land in this country to produce enough grain to meet our food and fuel needs. Efforts to produce substitutes for ethanol have only recently gotten underway in the United Kingdom and more recently, Canada. I therefore call on the auto industry to increase the production of Flexible Fuel Vehicles, the fuel industry to accelerate the development of alternative sources of alcohol for fuel and consideration of conversion of coal to diesel fuel, as they do in South Africa.*

*We can expect an increase in food prices primarily associated with the increasing costs of transportation for the foreseeable future. Given the necessary lead time to expand our production of alternative fuels, analysts within my administration suggest it could take as long as 7 years to stabilize the current situation.*

*At the moment, the large cities are calm, electrical power has been restored and food is flowing in the supply chain. We are balanced on the razor's edge, and I call on all Americans to work to maintain the current stability. As we will do what we can, so must you.*

*God Bless America.*

o

"I don't think we'll take down that chain link fence just yet, Matt, I didn't like the tone of his address."

"Yeah right, you've had a bomb shelter for what, 30 years? We have enough food stored for how long? With the amount of fuel we have stored one bomb could turn this compound into a hole in the ground. We'd better put those machine guns away before it rains and they get rusted."

"We can store them, set up, but I don't want to dismantle them other than lifting the gun off the tripods. Did you hear what he said; we're sitting on a razor's edge."

"We've been sitting on a razor's edge since 1945, Matt. Even if Iran and North Korean had the bomb, which is debatable, they wouldn't have enough to do much to us. The North Koreans threatened nuclear war if we interfered with the launch of their missile. We could wipe 'em out with a couple of Trident D-5s. The entire Chinese Navy is smaller than a couple of our CSGs. We're numero uno in military hardware; nobody is going to mess with us. You heard him, we have the food and it's just going to cost more."

"I'd hate like hell to wake up some morning and find out you're wrong Matt. I won't risk that; we'll keep everything topped off and our powder dry. We may have the food, but they have the fuel. If we don't export grain, people are going to starve and starvation is one of the reasons people go to war."

"We can't be the only country that produces rice."

"In world terms, we're a small rice producer, producing 9 million metric tons out of a total of 588.5 million metric tons, ~ 1.5%. We're the largest corn producer at 40% and 3<sup>rd</sup> largest wheat producer at 11.6% of the crop."

"I see what you mean. With grain production and distribution tied to hydrocarbons, I can honestly say, Houston, we have a problem."

"No chit Sherlock, what was your first clue?"

"So why didn't we interfere with their launch?"

"The big missile didn't go anywhere and the short range missiles were aimed at Russia and Japan. We didn't have to embarrass ourselves by having a failed interception. From what I read in the papers and saw on TV last year, everyone was telling them not to try and launch the big missile. What I don't like about it is that Kim Jong Il has embarrassed himself and North Korea. With his people starving, he took a big risk spending money to launch the missiles."

"Which leaves North Korea with no money to buy food, right?"

## When We Were Young – Chapter 8

"I hadn't thought of that, you're right," I admitted. "It just goes to show you Matt, I was right, just 30 years too early. I'd better check the batteries in the CD V-715."

"I'm sure the Navy can spare a couple of D-5s, don't bother. You just said neither the Chinese nor North Korea could go up against our Navy."

"I said that 2 D-5s could wipe out North Korea and 2 of our Carrier Strike Groups were bigger than the Chinese Navy. No one really knows how many nuclear weapons China has; I've heard estimates from 400 to 1,200."

"Who leads the word in production of rice?"

"The Chinese, who else? They produce 28¼% of the world's rice supply and India produces 22½%; combined, that's a little more than half of the world supply."

"If that's the case, why would our 9 million metric tons make a difference?"

"I don't know that our rice would make a difference, but what if we cut our exports of corn?"

"Because we're using them to produce ethanol?"

"Or, as feed grain. Oil isn't the only thing we import from Argentina, we import beef too. If Chavez won't let us import oil, we might refuse to import their beef."

"Oh good, McDonald's hamburgers will taste better."

"Which has what to do with the North Korean missile test?"

"Now that you ask, I don't really know."

o

His question caught me off guard, but that's what happens when you talk about too many subjects in the same conversation. About the only threat that North Korea would pose is if they exported any nuclear weapons they had to Iran. Someone was already commenting on that so I wasn't going to worry about it. We were at the age where our preparations were more for our kids than for ourselves. The President's speech suggested we should be concerned more about energy than food. There was an ample supply of food, it would just cost more. Moreover, we had a large garden and were growing the things that were hard to find in the grocery stores.

Now that Julia's husband had his head out of his behind, we didn't have anyone here, except for the grandchildren, who couldn't help with our defense, should it come to that.

We had a sniper team, 4 machinegun teams and 6 rifle teams. The place was dotted with foxholes, some to fight from and some to hold extra rockets, grenades and ammo. The thing I liked most about our grandchildren, in fact all grandchildren, was that you could spoil them and return them to their parents. All of which would happen as soon as we had some of our own. We were getting close to the blessed event, but it hadn't happened yet. One of the girls would probably decide to have her baby in the middle of some darned firefight. Matt was the lucky grandfather. Sarah and Rachel had babies about 3 weeks apart, spoiling their otherwise perfect record of doing everything together.

Getting back to the missiles; reports were that NK launched anywhere from 3 to 6 missiles and didn't hit anything but the Sea of Japan. That was good; they probably used up their missiles and their fuel. The US government knew exactly how many launches there were, NORAD followed them. Further analysis suggested that they were incapable of miniaturizing nuclear warheads small enough to fit on their missiles.

I was looking forward to the next day's news when NK would claim the tests had been successful (they didn't blow up on the launch pad). Now if that missile had gone just a little further and landed on Japan, we wouldn't be having this discussion. We be talking about how the US ended the war that began in 1950 and how we'd accomplished it with conventionally equipped Tomahawk cruise missiles. One had to wonder how much longer the people of North Korea would put up with that crackpot. One also had to wonder if Japan would continue to supply food to the North Koreans. Those 6 nation talks were 5 people talking, Russia, China, Japan, South Korea and the United States and one party not listening, North Korea. In 1953 they somehow got the idea that they could hold out longer than we could. Why not, it had worked for over 50 years and it appeared that South Korea didn't want to fight with the North.

"I heard that Costco got in a supply of Folgers and Charmin in, want to go with me to Prescott?"

"Only if we can stop at the Res on the way back, I need another case of smokes."

"That won't work Matt, the Res is one way and Prescott the other."

"Ok, you go to Prescott and I hit the Res, how many cartons do you want?"

"I've give you 2 grand, you buy all that you can get."

"Pall Mall, right?"

"Unfiltered."

For whatever reason we hadn't yet resorted to using gold and silver although we accepted it in the gun store for weapons and ammo, not that we were getting many customers these days. It was either the locked gate or those 10 half-grown German Shep-

herd's that were keeping our regular customers away. We began to accept orders for ammo over the phone and deliver it to Sedona.

Just before Labor Day, who should show up but that GI from Navajo Depot. This time he had 2 things, 40mm grenades and a 15 M203s. He must have really need money, he was offering the M203s for \$5,000 and the grenades for \$10 each. All he had was the M433 HEDP. He claimed that the rounds were being phased out in favor of a new NATO round that had improved safety. He went on to say this would be his last offering, he was scheduled to get out in a few months and needed traveling money.

Sue shelled out the 10 grand he wanted and had Tom take care of storing our new acquisitions. By the time Matt and I got back, the M203s were mounted, the grenades stored and Sue was wearing a Cheshire cat-like grin. She told Matt and me of our latest acquisition. What the hell, they couldn't put us in prison for any longer than they already could. I almost broke out laughing when I remember what she'd said way back when about our being prepared for anything.

The only thing we had left to sell was our class III weapons and ammo and all sales of class III were still suspended. I wondered what it would be that got us into the survival situation for which we were prepared, food, fuel or our weapons supply. Yes we were ready and no, none of us knew that that day wasn't that far off.

o

"What's the status on that SARS outbreak?"

"It has been contained. It only affected a few hundred people and most of the ones that died, died from pneumonia."

"Good, that's one less thing to worry about. What's our fuel situation?"

"We were topped off last week; every fuel storage tank is filled to capacity. The going price worked out to \$5.50 a gallon."

"What about other things?"

"All we have to harvest is potatoes and more tomatoes. We're harvesting the acorn, spaghetti and butternut squash. The girls are planning on canning spaghetti sauce. We dug, dried and bagged the onions a while back."

"Is there anything you can think of that we're going to need that we don't have?"

"Luck, a whole large bunch of luck."

"Is everyone equipped with a BOB?"



"No but we do have vehicle bags. Our only deficit is the lack of trained medical personnel."

"There's not much we can do about that, is there?"

"Not on short notice."

"Ok, I take our website down and run an ad in the paper indicating that we've exhausted our supply of salable ammo."

"Have we?"

"Not exactly no, but let's wait and see what happens. We may end up supplying ammo to some local militia or something."

"What are we going to do about people's jobs?"

"They might just as well go to work until we know something definitive. Have we replaced all of the parts we used to repair the vehicles after the solar storm last year?"

"All of them and extras. We have extra batteries and tires, full sets of belts and hoses and all the ignition and electronic components we'll need stored in the storage room."

"When can we start harvesting the potatoes?"

"Anytime, we had the first frost."

"Let's do that. Are the livestock ready for butchering?"

"That might be another month or two on the cattle, the hogs are ready now. However, we did buy 12 cases of chickens, bagged them and stored them in the freezers."

"Let's get the hogs butchered, cut and wrapped while we harvesting and storing the potatoes. You better tell the girls to harvest the remainder of the tomatoes."

"Do you want to butcher all 11 hogs?"

"Yes, it might be our last chance. We'd better take in the 2 steers too, regardless of weight."

"Gottcha."

o

"How long until we have the meat?"

"I put a rush on it, they'll kill the animals today and cut up the pork while the beef ages, we can pick up the pork in 3 days and the beef in a week."

"I should have asked you to order a case of Pullman hams and 2 cases of Cure 81s."

"Give them a call, maybe they can have the hams in by the time the beef is cut and wrapped."

"Tom, how lean will the ground beef be?"

"Fairly lean, Rob, Sue told me to have them add 2 boxes of boneless per steer and use up most of the fat."

"Good we needed 2½ steers and that will make up for what we were short."

"Mind telling me what a Pullman ham is?"

"You know those square hams that they slice in the deli? They come in a can and are called a Pullman loaf, probably from back when we all traveled by train."

"Oh, I see. It's a shame we're all in a hurry, cars and airplanes doomed the passenger train."

"A lack of fuel might bring them back. When I was a young man, airplane tickets were really expensive. I heard that the airlines might be forced to double prices and if they do, you'll see more trains and busses."

"Which President was it who wanted to deregulate everything?"

"Reagan. He broke PATCO, the Soviet Union and deregulated the airlines."

"So, when do the fireworks begin?"

"Be patient, they'll come. People won't be able to afford food and we'll have riots again. Then they'll revolt over the fuel prices and the country will go to hell in a hurry. It won't take much to trigger them this time around, if next summer is hotter than normal, we're done for."

"Why?"

"Our infrastructure is old and fragile, Tom. Demand for electricity outstrips the supply and anything can cause a blackout, even a solar flare. We consume far more fuel than we produce and the environmentalists oppose opening the new oil fields we have off the coast of California and Alaska. We had an ethanol shortage when they eliminated MTBE from the gasoline. That raised the price of gas 40 cents because it was short while they changed over. I didn't see the price of gas come back down, did you?"

"Not really."

"I suppose I'm a zealot, the voice in the wilderness crying, *Prepare ye the way of the Lord*. It's not a question of if, it's a question of when and what."

o

Riiiiiiiiiiiiiiiiinnnnnnnnnnnnngggggggggggggg

"Now what? I'll get the bell. It's October for crying out loud, how could we lose power now?"

*KNAZ-2. An early winter storm in the upper Midwest took down major power lines due to icing conditions. The storm, which is expected to spread to the northeast, dumped as much as 12" of snow in Detroit. A second storm is looming off the Pacific coast could move eastward before cleanup from the current storm is completed. As with the solar flare of 2006, energy supplies are being redirected by order of the Governor and we anticipate restoration of service within the next 12 hours. Stay tuned for late breaking news from NBC.*

"Julia called, they're letting school out early and Pete and she will bring Miguel's boys home with them."

"Matt Jr. will probably be home within the hour if the power is going to be out for 12 hours. I'll go find Miguel and tell him about the boys."

"Daddy, what happened to the lights?"

"Power lines down in the Midwest, Liz. It was just on channel 2."

"I think I'll get Tom and we'll go riding."

"Remember not to try and shoot a gun from the back of your horse."

Arizona does not observe DST (however, the large Navajo Indian Reservation, which extends from Arizona into two adjacent states, does). This is in large part due to energy conservation since the temperature in and around Phoenix and Tucson is hotter than any other large US metro areas during the summer, resulting in more power usage from air conditioning units/swamp coolers in homes and businesses. An extra hour of sunlight would cause people to run their cooling systems much longer than needed, thereby wasting energy.

I sort of figured they'd ride the fence line and come back to the house. When they got to the back gate they went through it and headed west to have a real ride. It was getting dark by 5:30 and they still weren't back.

"Do you think I should go look for them, Sue?"

"If they had trouble, wouldn't Tom have radioed back with the radio?"

"It would depend on how far out they went. Those radios don't have that good of a range."

"You'd have to ride a horse; the area is too rough for any of our vehicles."

"Perhaps we should go and see if there's a problem, I'll have Miguel saddle some horses."

"You don't ride."

"Then it's about time I learned. We'll take a 2-meter handie talkie and a portable CB radio, you stand by the radios."

"I hope everything is ok."

"And I hope I don't fall off that damned horse."

"There you go boss, tamest horse we have."

"Does it have a name?"

"Salina."

o

Do you have any idea how hard it is to track someone in the dark? We could follow hoof prints on that sand, but there was a lot of rock and we were having one heck of a time. We went west about 3 miles and then turned south. We meandered in that direction and eventually turned back east, all the time not getting any reports on channel 9 on the CB or the preset frequency on the 2-meter hand held. Eventually, around 11pm, we ended back on highway 89 about a mile south of the ranch. We said crap and went home, where we found Tom and Liz getting ready to go look for us.

"Where were you, I called and called?"

"So did I, on both radios, when did they get back?"

"About 7:30. Why weren't you on the emergency channel 10?"

"Because the emergency channel is channel 9. What frequency were you using on the 2 meter band?"

"144.275."

"Dear, the preset frequency is 144.200. 144.275 is our backup frequency. Why didn't you turn the scanner on, it has all of our preset frequencies programmed into it?"

"I can't even figure out the TV control, that's why."

"Huh?"

o

The second storm moved in before power was restored making it impossible to restore power to the upper Midwest. We had our power back as promised, within 12 hours. Because it was autumn and not summer, only the primary generator kicked in and it ran at less than full power. It appeared we'd slipped through another period of trouble when...

*KNAZ-2 joins the following program in progress. At 3:15 am, a large explosion occurred in downtown Atlanta followed shortly thereafter by explosions that rocked Dallas and Houston.*

*White House representative Tony Snow discounted the possibility that the perpetrators had nuclear weapons, stating that, "If they had nuclear weapons, they would have used them and inflicted more damage than they did."*

"Terrorists?"

"Obviously. The real question is, was it Muslim terrorists."

"I don't think so, who is based in Dallas and Houston?"

"Oil companies?"

"Yeah, but who is based in Atlanta?"

"Several major national and international companies are headquartered in Atlanta or its nearby suburbs, including four Fortune 100 companies: Coca-Cola, Home Depot, Bell-South, and UPS. The headquarters of wireless giant Cingular can be found about two miles inside the perimeter on I-75. Delta Air Lines is also headquartered in Atlanta. Rubbermaid moved there and CNN Center is there."

"CNN? That might explain Atlanta."

"What do you have against CNN, they fired Peter Arnett?"

"Yeah but, they kept Wolf Blitzer and fired Aaron Brown."

"Brown is better off, he's teaching at ASU in Tempe. They had to fire him; he was the voice of reason in their insanity. Put on CNN and they'll be blaming the bombings on the White House. Either it's home grown terrorists or imports; and, either way, the White House didn't catch them when they bought the fertilizer."

"You're assuming it was ANFO?"

"Yeah, a little fertilizer, a splash of fuel oil and boom. It's not that hard to make, not if Tim McVey could figure it out."

"Let's say ANFO. The next question is who, people angry over gas prices or eco-terrorists?"

"Well, there's ELF and they're linked to ALF."

"Huh?"

"Earth Liberation Front and Animal Liberation Front. Don't forget PETA, they're probably involved with ELF too."

"Why eco-terrorists and not people angry over gas prices?"

"People angry over gas prices wouldn't waste fuel making a bomb."

"But why ELF?"

"Because the oil companies are pushing opening the West Coast and Alaskan oil fields?"

"What's new about that, they've been pushing for years and have Bush convinced. They just can't get it through Congress. A new bill was introduced in the House to open Alaska and the California Coast."

"Ok, let's say I buy that, is there anything to be concerned about, assuming it was eco-terrorists?"

"Not unless they decide to blow up a refinery. Remember what happen on the Gulf Coast when Katrina swamped the refineries? Gas doubled in price overnight. If they blow up a refinery in our present situation, what would that do?"

"It wasn't as simple as that, part of the problem was the loss of electricity to the pumps along the pipelines. They couldn't get gas delivered to the east coast if I remember."

"That's right, it was only temporary, but the price of gas went through the roof for a few days. I think perhaps we're in for a rude awakening; all they had to do is blow up one

refinery and destroy a couple of pumping stations. Think of the trouble that would cause for a country already strapped for fuel and depending on those fuel supplies to distribute what food there is."

"Chit."

"Double Chit. Pray it doesn't happen or we'll be in for trying times."

o

One of our countries founders who was more disliked than liked was an Englishman by the name of Thomas Paine. Paine wrote a pamphlet called Common Sense. The first issue began with:

*These are the times that try men's souls. The summer soldier and the sunshine patriot will, in this crisis, shrink from the service of their country; but he that stands it now, deserves the love and thanks of man and woman. Tyranny, like hell, is not easily conquered; yet we have this consolation with us, that the harder the conflict, the more glorious the triumph.*

When he died, 6 people attended his funeral. People made much ado about his being a Deist and his work *The Age of Reason*. A hundred year later, of the man, another said, "I have always regarded Paine as one of the greatest of all Americans. Never have we had a sounder intelligence in this republic... It was my good fortune to encounter Thomas Paine's works in my boyhood... it was, indeed, a revelation to me to read that great thinker's views on political and theological subjects. Paine educated me then about many matters of which I had never before thought. I remember very vividly the flash of enlightenment that shone from Paine's writings and I recall thinking at that time, 'What a pity these works are not today the schoolbooks for all children!' My interest in Paine was not satisfied by my first reading of his works. I went back to them time and again, just as I have done since my boyhood days."

*The Age of Reason*, written in parts during the 1790s and dealing in a systematic examination of organized religion, advocates a skeptical and rational examination of religion known as Deism. Paine stresses his belief in the oneness of God, and the "Word of God" as exemplified by nature and the exercise of reason. Thus, he rejects many of the tenets of both the Old Testament and New Testament. As he stresses: "I sincerely detest it, the Bible as I detest everything that is cruel." Paine provides not only criticism of religion, but a foundation for belief in a supreme being free of the confines of dogma.

The completed work was published in 1795. Paine became extremely unpopular at the time due to this book and largely became a social pariah upon his return to America until his death in 1809. Yet his treatise became quite influential in the history of the skeptical, rationalist, and freethinking movements and remains one of the most persuasive critiques of the Bible and every other 'revealed religion' ever written. However, it is often ignored that central to this text is an argument in favor of the existence of a Creator, one

based on reason and logic as opposed to the various fundamentalist modes of both religion and atheism.

And, Virginia, that's why there aren't (m)any statues of Thomas Paine.

◦

*Most people are on the world, not in it; have no conscious sympathy or relationship to anything about them, undiffused, separate, and rigidly alone like marbles of polished stone, touching but separate.* – John Muir

How from their original goals these environmentalists came. They drove gas guzzlers and cried over owls. They'd sit in a tree, defying anyone to cut it down. Why? Because it was 200 years old; never mind that cutting the one tree down meant saving thousands and eventually millions of gallons of gasoline. They opposed harvesting the petroleum off California's coast because there might be an oil spill and they didn't want to harvest oil off the coast of Alaska because the new pipeline might do something the first one didn't.

We were already in trying times, or hadn't you noticed? Our electrical infrastructure was crumbling and food and fuel prices have moved the cost of food to 25% of disposable income. People still believed it was a problem the government had to solve for them. I can just see the President down on the Gulf Coast holding his hand up and forbidding the wind to blow. Or, Laura walking down crop rows watering the plants. It was an institutional crisis of the worst magnitude brought on by people with opposing ideals, equally represented in a Congress that was unwilling to bite the bullet and begin planning for the future. The answer was perhaps to use what we had while implementing a plan that provided for the futures of our children and grandchildren. Nah, that made too much sense. Wind turbines were ugly and killed birds. Solar power was expensive and took too much land mass. Plus it was simply too expensive to clean the coal. None of which was totally true. As the demand for alternative energy sources grew, industry introduced economies of scale, reducing the cost of alternate forms of energy.

The worst part of it had been God listening to our discussion. We weren't wishing for anything but it happened anyway. I'd have thought the government would have immediately improved security at the refineries and the pumping stations, but they didn't. Whoever the terrorists were, they knew what they were doing. They used a commercial delivery van at the refinery and U-Haul rentals at the two pumping stations. The refinery caught fire and the pumping stations would take months to repair. All of which happened the day after Matt's and my conversation.

That cinched it for us; this had to be the work of eco-terrorists. The major downside was the loss of the pipeline. They were clever, too. They took down pumping stations on two different pipelines, the one to the east and one heading north to Kansas City. Before the echo of the TV died, we were on the phone getting everything topped off. We didn't



need a lot, a few hours' worth of B100 and a few gallons of propane; that wasn't the point; there probably wouldn't be any more deliveries for months.

This was one hell of a time to take out that pipeline, with early winter storms increasing the demand for home heating oil in the Northeast. That's the point, isn't it, hit when the damage will be magnified? It was a good thing I was out of the stock market, stocks plummeted, but the price of gold increased \$26 an ounce. We also had a few phone inquiries about guns and ammo. We didn't need enough from Costco or Sam's Club to justify the gas we'd burn making the trip.

It was disappointing in a way, Sue and I had spent half a lifetime waiting for the shoe to drop and we got home grown terrorists instead. Oh, I meant to tell you, the guy on TV said no arrests had been made in any of the bombings. Not surprising when the Border Patrol couldn't seal the border and we hadn't found bin Laden, yet. We should have hired the Mossad to take him out. We could have had him when he was expelled from Sudan, but we missed our chance.

In the autumn and early winter of 2007, the world and the US was a far different than anyone had imagined. I clung to my belief; it wasn't if, just a matter of when and what. However I began to wonder if we'd live to see that when and what, we'll all be 69 this coming year and we were entering that phase of life where one begins to think about life expectancy. I said think about it, not worry about it, when your time was up, it was up and that was it. I just wanted to outlive George Burns by a couple of years, a person couldn't ask for more than that.

o

*...continuing shortage of home heating oil in the Northeast coupled with severe winter storms has forced the relocation of thousands into public shelters. There have been no additional attacks on the pipelines since the President federalized the National Guard troops in several states and heightened security on pumping stations, pipelines and refineries.*

*Kerr McGee, in a press release today, estimates it will take 14 months to complete repairs on the refinery destroyed in the attacks of October 24<sup>th</sup>. Work continues on the pumping stations destroyed and estimates put them back on line by early January.*

*The White House announced today its intent to present a bill to Congress calling for the immediate implementation of fuel rationing. A source who asked to remain anonymous said companion legislation would also seek to impose food rationing, which hasn't occurred in the United States since the end of World War Two.*

"That won't affect us much, they'll have to allow fuel for every licensed driver and we have 22 people with licenses. It isn't like we're exporting millions of gallons of gas to Europe and the Pacific like we did back then."

"How much do you figure we'll get?"

"Maybe a gallon a day per person. I wonder if they'll apply the rationing to biofuels."

"I suppose they could."

"How hard would it be for us to produce biodiesel?"

"Not hard, we can buy a home processor that will produce about 55 gallons in 3 hours, assuming we can get the vegetable oil."

"Is anyone in Sedona doing that that you know of?"

"I never looked into it so I couldn't say. However, the places that use vegetable oil in their businesses must have some way to dispose of it."

"I'll ask Liz and Tom to look into it. We'd better buy one of those biodiesel processors, just in case. Can you think of anything else we could do to preserve our supply of fuel?"

"I looked into wind turbines but there are few places in Arizona with enough steady wind to make them worthwhile. The way the sun shines, we might be able to use solar. That works out to about \$10 per watt."

"So, to replace 360kw of electricity would cost \$3.6 million?"

"I could be wrong, but that's my best guess, Rob."

"It would take a fair amount of space, too. That may not be our best solution. I think we'll go with the biodiesel setup, maybe even get a couple if they're inexpensive. If we could distill some of our own ethanol, we have the unleaded gas to mix with the alcohol."

"We'd never get a permit for a still, so we'd have to do that on the sly."

"What's new about that? Anything that's worth doing or is fun to do is illegal anyway. Besides, can't we recover some of the mash for livestock feed?"

"They do in Iowa."

"If they can, we can. Can we buy a still?"

"They're for sale on the internet. We could just as easy build one out of copper."

"What do you know about making E85?"

"Not much, but it takes anhydrous alcohol and I think they use benzene or some other chemical to produce it. It has to be double or triple distilled."

"Do you want to buy 3 stills?"

"Might as well, that would make it easier. What about permits?"

"Applications come with the stills. We might as well open a permanent office for the ATF."

"Ok, 2 biodiesel processors and 3 stills. Do we need anything else?"

"The company sells everything we need except the grain. You can figure about 2.6-2.7 gallons of ethanol per bushel of corn. We should try to buy bulk vegetable oil if we can't get used oil from Sedona."

You'll have to understand, being involved in the firearms business for the better part of 40 years took the edge off of dealing with the ATF. A few of them actually knew what they were doing and the longer you dealt with them the easier it became. They developed expectations about you and that helped when you had a large stash of stolen military goods you didn't want anyone to know you had. Plus if you were going to get in the business of producing your own fuel, maybe your firearms guy could put in a good word with the alcohol guy. Anyway, once you converted the ethanol to anhydrous, you couldn't drink it, depending on how you went about making the conversion.

We wouldn't be doing it anyway, that was something for Tom, Pete, John and the others to do. Now, if they wanted us to test the white lightning, I suppose we could volunteer to do that. As far as those 3 generators went, Matt Jr. was keeping them in tip top shape and we had a large supply of filters and spare parts. If it was worth doing in the first place, it was worth doing well.

o

"I've been talking to Matt; we're going to buy the equipment to produce our own fuel."

"What kind of equipment?"

"Two biodiesel processors and 3 stills."

"Where are you going to put all of this new equipment?"

"Good question, the pole building is full up with livestock feed. I guess we'll have to erect another pole building."

"Don't Matt and you get to testing that alcohol, Sarah and I won't put up with you men drinking."

"Where would you get an idea like that Sue?"

"Tell me you didn't discuss volunteering to test the output of those stills."

"Just a little taste. It would be about like vodka."

"First you go and buy a bunch of stolen military hardware and munitions and now you plan to go into the moonshine business. If they give you more than a year in jail, it would amount to a life sentence."

"We're going to get the necessary permits for the stills. Didn't you hear the news? They're planning on implementing food and fuel rationing. We're just doing our civic duty dear. We can get enough unleaded to mix with the ethanol and we'll have ample E85 for your Jeep."

"You already have a fuel station tank of unleaded, where are you going to store the E85, put in another tank?"

"I hadn't thought of that, you're right, we need another tank."

"You already have 500-gallon of unleaded and 10,000-gallon tanks for E-85, how much do you plan to store?"

"Enough so we don't run out."

"I'm going to order a 55-gallon drum of red paint and have someone paint a bullseye on this place, Rob. That's what you're accomplishing, making us a target for all of the people who don't have food, fuel and weapons."

"If you'd rather sit in the dark or read by a kerosene lamp, that's fine with me."

"I'm sure you have enough kerosene that I could do it too, don't you?"

"Three 55-gallon drums. It's like eating peanuts, once you start, it's difficult to stop. How prepared is too prepared?"

"Every time something happens that's just an excuse to buy more, isn't it?"

"We hadn't planned on making trips to Costco or Sam's Club."

"You should have, we have several women here and that's a lot of feminine hygiene supplies."

"Make up a list of what you need and Matt and I will make a trip to Prescott."

"You wouldn't feel awkward buying pads and tampons?"

"I might have when I was 20 years old, but not anymore. They'll be envious of two old men with wives young enough to need them. Do you want us to buy some of those made up pizzas?"

o

"Did Sue give you a hard time too?"

"Yes, but I think I shut her up when I offered to go to Costco and buy feminine hygiene supplies. She did have a point; we're going to need a tank to store the E85 we produce and a building to hold the equipment."

"We'll need a grain silo to hold corn and something to hold the veggie oil."

"Maybe she was right; we'll need a 55-gallon drum of red paint."

"Huh?"

"To paint the bullseye on the ranch."

"Maybe we should think about burying the fuel tanks, we do have enough here to attract attention, now that you mention it. With us having livestock, the grain silo is easy to explain, but not all of the fuel tanks. We can explain the second pole building as additional hay storage."

"Why didn't I think of that?"

"You were probably too busy ducking. I just blame it all on you."

"Thanks a heap."

"Don't mention it. With you being as survival oriented as you are, I've always had an easy out. I'm just the gunsmith after all."

"It's a two way street pal; I don't know how to build things like suppressors. All I need to do is maintain accurate records."

"Where do you have the records of our purchases from that guy from Navajo Depot?"

"Under military surplus. I didn't say that everything we have is in the records for the feds. Those items are expendables and accounted for the same as rounds of munitions."

"I'm surprised you'd have any record at all."

"Why, if they looked hard enough, they could find everything we have. I keep track of everything so I can generate a list of what we're short of at a moment's notice. In our present situation, we have the means to protect ourselves and what we have. About the only thing we're short on is people and I'd rather not turn the ranch into a trailer park. Having Tom's parents and Miguel and his family here is about as far as I'm willing to go to extend our hospitality. I suppose when those boys are old enough to get married, I'd be willing to put in homes for them if they want to stay but that's the absolute end as far as I'm concerned."

"Not to change the subject, but are we planning on giving out Thanksgiving and Christmas packages this year?"

"That guy really pissed me off. Especially when I realized he was half drunk on beer and his family was hungry. Has anyone thought to talk to the pastors in town and get a list of people who are needy?"

"It probably goes for a majority of the people in Sedona, Rob. But I'll ask and we'll put together some kind of list. Do you plan on giving out ground beef again this year?"

"Do you suppose we could get a couple of cases of chickens? We could give them a few packages of ground beef and a couple of fryers or a baking hen. I don't believe we can find enough turkeys, do you?"

"I doubt it. How about cutting back on the ground beef and including a beef roast and a pork roast?"

"Let's talk to the meat department manager at Costco and Sam's Club and see what we can work out with them."

o

Costco was planning on a promotion of pork loins and the manager was willing to part with 4 cases if we'd pay the regular price. Sam's Club was long on fryers and we bought 4 cases of those. Although this was pretty much a spur of the moment decision, rationing hadn't begun, yet and, we were able to assemble enough food for 50 families. We should have brought a semi.

The packages this year would consist of:

- 1 pork loin
- 1 beef roast
- 1 baking hen
- 2 fryers
- 2 pounds of bacon
- 5 pounds of ground beef
- 1 6 pack of tuna

20 pounds of home grown potatoes  
1 bag of onions  
1 8 pack of diced tomatoes  
1 8 pack of green beans  
1 8 pack of niblets  
1 6 pack of mushroom soup  
1 6 pack tomato soup  
1 large jar of peanut butter  
10 pounds of macaroni  
1 can of coffee  
1 box of tea  
1 box of powdered milk  
25 pounds of flour  
10 pounds of sugar  
1 box of baking soda  
1 can of baking powder  
2 pounds of salt  
1 can of pepper  
1 bundle of macaroni and cheese  
1 bundle of toilet paper  
1 box of Hershey bars (for the kids)

We decided to do the same packages for Thanksgiving and Christmas. We were originally going for feminine hygiene supplies and loaded up on those. We had enough we could include a package of those with the food supplies. I'm sure someone would still be looking for the turkey or ham, but that was on them, not on us. I wasn't going to get involved with passing out the boxes, I might kill that SOB. We bought all of the food and items we intended to pass out, we weren't cutting into our food supplies except for the potatoes and onions and what the hell, gold was up another \$25 an ounce.

Tom came up with an even better idea of how to handle passing out the boxes. Rather than delivering them ourselves, we delivered them to the individual churches and let the pastors pass them out. It gave us anonymity and eliminated any hurt feelings. We were able to give because for now, we were part of the haves and not the have-nots. The pastors all promised not to reveal who the benefactors were. Remember, the gift is in the giving. One is encouraged to remember chapter 5 of the Book of Acts, Matthew chapter 6 and Galatians 6:7 *Whatsoever a man soweth, that shall he also reap*. Our approach this year was so much better than the previous year. It was only important that we knew and that we did what we could.

o

That passage from Galatians also applied to those eco-terrorists. One of these days, they were going to get what they had coming. It was bad enough when PETA broke into a laboratory and let the lab animals loose. To my way of thinking a person had to be fairly stupid to do such a thing, they had no idea of the consequences of their action.

What if those lab animals were infected with something a person didn't really want on the street? How significant would the setback to medical research be without the results from the animals they released?

Could we have done more? Perhaps, perhaps not. Being prepared is more than a physical state; it also includes a mental state and a spiritual state. If a person hasn't squared himself with his/her creator, the CEP put the bomb on top of your bunker. Like the little boy said in the movie, *Hey mister, God didn't make no junk*. Actually, the statement was made by a 12-year-old-boy in Alabama and quoted by nearly everyone. And yes, we checked and couldn't get enough turkeys or ham.

The trouble that you waited for finally came and was happening right now, how could we not recognize or realize it? It crept up on us, like a thief in the night. It was a guy at the front gate who said he was looking for work because he needed money to feed his family. John had answered the gate and didn't see anyone around. He thought since it was between Thanksgiving and Christmas it wouldn't hurt to provide one of those packages to the man. He invited the man in.

While the man stood and waited, he 'cased the joint'. He couldn't have avoided seeing the tarps over the foxholes. He didn't miss the livestock and not all of our fuel tanks had been buried yet. We had installed a second service station fuel tank and were going to transfer the new E-85 to it. We need to back fill the holes with the other tanks, but there are only 24 hours in a day.

The new pole building was about half erected and the new equipment was just sitting there in the shipping containers. For as much as he'd seen there was also a lot he didn't see. He didn't know what was in the foxholes or see John's gun because it was cover by a jacket. Had he waited a week, the only thing he would have seen was the covered over foxholes and the 50-gallon farm tank holding E85. The boxes were made up except for adding the meat from a freezer. It was actually 2 boxes, one box would have been heavy and we're using 2.

John brought the man the first box and return to retrieve the second box. Tom was upstairs in our house watching the man; you didn't think John would act stupidly, did you? Tom noted the guy looking around, apparently taking mental notes of what he did and didn't see. John help the man carry the boxes to his car and the man left.

"I could be wrong, but I think we have trouble, he cased the ranch closely."

"Are you sure he wasn't just curious?"

"As I said, I could be wrong, but I don't think so."

"In that case, we'd better trust your judgment. We maintain a guard tonight using 2 people, one upstairs and one on roving patrol."



"Liz can take 1<sup>st</sup> watch upstairs and I'll be the rover," Tom suggested. "Who wants to relieve us at midnight?"

"Julia and I will."

"Thanks Pete, John do you want the 4am to 8am shift?"

"Ok with you Sara?"

"Ok, we'll do it."

"Matt can you get your 3 to do the day shift?"

"Matt Jr. will be late for the 4pm shift, but I'll cover for him. Yeah, we've got the day covered. How long will we need to do this?"

"Maybe a week," Tom replied. "If I'm right they won't take that long before they try to break in."

o

It happened ~36 hours later during the midnight to 4am watch. Pete was roving and they must have not seen him. A silent shot took out the yard light, throwing the building area into total darkness. Julia immediately moved to wake her mother and me up and Pete slipped into his night vision goggles. His HK91 was locked and loaded and he slid the safety off. Sue tried to phone the others but the line was dead. She stated paging everyone on 144.200. We most definitely needed a better notification system. I got my M1A and ALICE gear. The M1911 was in the holster and I jacked in a round and locked the gun, returning it to the holster. I pulled on a light jacket, donned the ALICE gear and loaded and locked the M1A. I handed Sue her ALICE gear and M-15.

"Forget it Sue, everyone will roust out when they hear the gunfire. We're going to need night vision; I'll get it while you position yourself."

Julia didn't know the intruders had cut the phone lines and she attached her suppressor to her HK91. She could see several men carrying either AR-15s or M16s.

"Juls, are you ok?" Pete asked over the FRS radio.

"Pete, there are 6 men out there, you watch yourself," she replied and fired at the last man coming through the gate. "Make that five."

## When We Were Young – Chapter 9

I wasn't going to use a suppressor because we needed the sound of gunfire to wake the others up. I handed Sue the 4<sup>th</sup> generation monocular and she attached it to her M-15. I aimed at the guy leading the group and introduced him to my Super Match. He folded up like that 175 gr. Black Hills BTHP needed to be protected. I'm not sure that my first shot didn't wake up people in Flagstaff. I heard Pete checking the magazine capacity of the SA XD .45. If he put all of those shots into one man, the guy had to be leaking like a sieve. Julia took out the last man in line, putting her one up on the rest of us. Sue made a guy pay for disturbing her beauty rest and that left one man standing. Pete nearly finished emptying his magazine into no. 6.

"How many of them are there?" Matt asked over the FRS radio.

"There were 6, Julia got 2, Pete got 2 and Sue and I only got one apiece.

"Why didn't you call?"

"They must have cut the phone wires, Matt."

"I missed all the fun. I go make sure they're all dead."

Of course by this time, we could hear a siren in the distance as a Deputy responded to the sound of the gunfire. Thieves-0, Natives-6. It was all too evident that Pete had spent some time on the range based on the grouping of his shots. He did the failure to stop drill twice on each of the two guys he took out, they were barely recognizable.

"Tom, get some of those portable light stands, so we can see the damage."

We had safed our weapons and put the one we fired on the front porch. No doubt the Sheriff would want to run ballistic tests. A deputy rolls out in the middle of the night to the sound of gunfire and the first question out of his mouth when he got here was:

"What happened here?"

"Those 6 guys broke in and we shot them."

"Is anybody hurt?"

"Matt says their all dead."

"No, no, are any of you hurt?"

"I have a little ringing in my right ear."

Over the course of the next few minutes 3 more deputies and 1 State Trooper pulled in followed by Paramedics and 2 ambulances. One guy started taking pictures and 4 of them questioned those of us who had been involved in the shooting. When they had all the questions asked, they switched and started over. I suggested that someone put on an urn of coffee; we'd still be answering questions at lunch time.

I realized this was a major incident when Sheriff himself pulled in. It got even more interesting a short time later when ATF agents showed up because we had a class III license. After Julia, Sue, Pete and I had repeated our account 4 different times to 4 different questioners, and the Sheriff's Department took about 200 photos, the invaders weapons were recovered, the bodies loaded and our weapons were seized, but we got receipts.

Finally, Sarah announced that breakfast was ready for everyone and we should take time out to eat before we resumed the 'third degree'. Matt had been working with those federal boys proving to them that our class III inventory was intact. While they didn't seem satisfied, they left. Over breakfast, we explained to the Sheriff and his Chief Deputy how we happened to find ourselves in our present situation. We were printed and photographed and around 11 am they finally left.

I dug out replacement weapons and asked Tom to call an electrician to replace the shot out yard light and arrange for 2 additional poles and lights. We made the papers and TV, however the only mention of what the thieves were after was fuel and firearms. No reporters were allowed past the front gate to the property. However, because the attempted theft, we were allowed to transfer the unsold firearms to the corporation and return our class III license. They ran that story on page 6.

"Why don't we transfer the other weapons to the corporation and totally close up shop?"

"Up to you Matt. That would allow us to set up the biodiesel and alcohol operations in the office building and use the new pole building for additional livestock feed. We need to hurry up and get all of those tanks buried too."

"I sure never thought things would turn out this way."

"Me either. I can tell you one thing we need to do, reinforce that front gate. Maybe we can add some razor wire or something."

"We might be able to top it with razor wire, but only if it's high enough. I don't expect building codes allow a person to put razor wire down to ground level, which would be too much of a hazard."

"Let's get these firearms transferred and shut the business down. Did the Sheriff say how long they'd be keeping the weapons we used?"

"He didn't say anything to me, why don't you call and find out?"

o

"What did he say?"

"That they will hold the weapons until the County Attorney makes his determination. Once he concludes the shootings were justified, we can pick the weapons up. We need to get some media coverage that due to the circumstances, we're selling our remaining inventory and going out of business. We might want to let them in to do a before and after series of photos. That would also be a good way to announce that we starting up an operation to produce our own biodiesel and emphasize that we'll only be doing very small scale production."

"How are we going to set it up?"

"We'll put the ethanol operation in the big store and the biodiesel converters in the old class III store. What are you doing to do with your gunsmithing equipment?"

"I moved it down to the armory in the underground storage building."

Over the course of the next 3 weeks, the tanks were finished up and back filled, the gate extend to 7' high, the new outdoor lighting added and the media was invited in for the before and after photos. The pole building was completed and filled with feed and hay, and a small silo for corn finished off and filled. We delivered the Christmas packages to the pastors in Sedona and recovered our weapons from the Sheriff's office. We submitted all of our records to the ATF as required by law and that was the end of that. For all intents and purposes, Rob's Roost was now nothing more than a small scale livestock ranch that produced its own fuels and food. Only the area in and around the buildings was maintained as a high security area. A gate not unlike the front gate allowed the animals out into the pasture area.

"Is the Sheriff going to let us keep our CCWs now that we're out of the gun business?"

"I shouldn't see why not. We'll know when they come up or renewal."

"What we should do is open our range to the Deputy stationed in Sedona."

"Get on the Sheriff's good side you mean?"

"Couldn't hurt."

o

Coconino County Sheriff's Department is divided into 3 Patrol Districts. The Flagstaff Patrol District is responsible for providing patrol functions to the eastern and southern portions of Coconino County. This includes the substations in: Tuba City, Sedona, Blue

Ridge and Forest Lakes. Each of these substations has an assigned deputy. In addition to these community substations, there are six community policing deputies assigned to: Kachina Village, Pinewood, Doney Park West, Doney Park East, Timberline/Fernwood, and Mormon Lake/Ranch Areas. Requests for law enforcement officers for special duties / assignments also are managed by Flagstaff Patrol.

Flagstaff Patrol is staffed by: (1) Lieutenant, (5) Sergeants - three Patrol Sergeants, one Administrative Sergeant, and one Search & Rescue Sergeant, (4) Corporals, (17) Deputies, (1) Civil Deputy, (5) Substation Deputies and (3) Administrative Specialists.

Coconino County is the largest County in Arizona and the second largest in the contiguous US, San Bernardino being the largest. Approximately 46% of the land in the County is on Reservations. The other Patrol Districts are Page and Williams. Despite the large area, like San Bernardino (33/km<sup>2</sup>), Coconino County is sparsely populated (2/km<sup>2</sup>) thus being more like Inyo County (1/km<sup>2</sup>). 30% of the population is Native American, being mostly Navajo with smaller numbers of Havasupai, Hopi, and others.

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Our ranch, at 320 acres, covered ~1.3km<sup>2</sup>. One section, 640 acres, is equal to ~2.59km<sup>2</sup>. I was happy we moved the biodiesel and ethanol operations to the business building; it might have been too cold out in that pole building. It had been a pretty dirty trick teaching me to ride horses at night, the upside being they didn't run the horses. Because of the biodiesel operation, we did have one large above ground tank holding vegetable oil. The tank was new and lined, permitting the ladies to refill their vegetable oil containers when they wanted. On Christmas Day, those eco-terrorists struck again, this time in the Quad Cities area where several different pipeline systems were collocated.

We didn't lose power and were generally unaware of what had happened until someone turned on a TV and inadvertently ended up on CNN. The explosions cut off natural gas and petroleum products to a large area of the Midwest, and they were in the midst of another winter storm. The majority of homes, in Iowa at least, are heated by natural gas. I began to suspect that this wasn't the work of eco-terrorists, they most certainly wouldn't want to pollute the land with oil spills. If not them, then who? It occurred to me that in mid-2006, Osama bin Laden had threatened that more strikes were planned for the US on an audio taped message. Later in the day, in an audio taped statement, a spokesperson for ELF denied involvement in any of the terrorist attacks that had happened over the past few months.

"If ELF didn't do it, who did?"

"How about Muslim extremists?"

"Do they have a history of using ANFO?"

"ANFO has occasionally been used in terrorist bombings. It has seen use by groups such as the FARC, Provisional IRA, ETA, and various Palestinian extremists. A more sophisticated variant of the standard ANFO reaction was used in the Oklahoma City. The thing is, we have quite a few radical Muslims in the US and they might be more inclined to use ANFO."

"So it's Katie bar the door, here come the Muslims?"

"I don't have the slightest idea. For sure it's Katie bar the door, here comes someone."

"But we're ok with Mexico, right? They elected a conservative President?"

"Unlike like the remainder of Central and South America, yes."

"This crap has been going on since that damned solar flare took out the lights 18 months ago, when is it going to end?"

"Good question and when you figure out the answer let us all know."

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It was like a mystery novel that was 800 pages long that didn't reveal the culprit until page 799. If the government knew who was behind all of this crap, they weren't saying. So you didn't really know if they knew and were being quiet or were more likely clueless. If they did say something, it would generally run in the vein of, 'We have several parties of interest'. In turn, that led to the media speculating that it could be anyone from Osama bin Laden to Bradgelina (Angelina Jolie/Brad Pitt).

"Are we good on food?"

"We are unless you manage to outlive George Burns."

"Ammunition?"

"WW III, WW IV and WW V."

"Fuel?"

"40,000-gallons of B-50 and 20,000-gallons of vegetable oil. Plus 15,500-gallons of E85 and 8,000-gallons of unleaded."

"I'm sure we forgot something."

"Probably, but at the moment, I don't know what it could be."

"Are we ok on medications?"

"Nobody here takes pills. But, we do have some CLS bags, plenty of bandages and a large supply of QuikClot. In addition, we have large supplies of over-the-counter medications."

"What about an oxygen machine and a defibrillator?"

"Do you really want us to bring you back if you go?"

"Why not?"

*"I'm gonna live forever  
I'm gonna learn how to fly  
I feel it comin' together  
People will see me and cry  
I'm gonna make it to heaven  
Light up the sky like a flame  
I'm gonna live forever  
Baby remember my name."*

"Rob, are you good at anything?"

"Probably, why?"

"Great, then I won't have to worry about you making your living as a singer."

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The conversation didn't end there. By New Year's we had ourselves convinced that the people behind the bombings were probably home grown Muslim terrorists. Like those people in Lodi or down in Florida. Except to the extent it would interrupt our power supplies it wouldn't really affect us. However, this was 2008 and you know what that means, right? Beijing. Olympics. Taiwan. Independence Movement. WW III?

And just who would that depend upon? China had made itself perfectly clear on the subject. The US and Japan had been equally clear. Conclusion, it would depend on the Taiwanese. While North Korea had proven itself incapable of building an ICBM, they had No-dongs that could reach Japan. The only question remaining in that equation was, 'had they managed to fit a nuclear warhead to the Scud?' A more extensive redesign of the Scud technology may have begun in the same 1988 time-frame as the modification program that resulted in the Scud-C. The new missile [variously called No-dong-1, Ro-dong 1, and Scud-D has a potential range/payload capacity of 1,000-1,300 km/700-1,000 kg. The higher range would cover a wide swath of cities from Tokyo to Taipei. At the extremity of the higher range, authoritative analysts estimates the CEP of the No-dong to be 2,000-4,000 m. Who says close doesn't count?

Even if someone targeted Flagstaff, they'd probably be aiming for the airport and that was a long way from Sedona. Moreover, the wind was generally out of the west so any fallout from a ground burst shouldn't really affect us down here. We didn't have a lot of livestock and the entire mixed herd would fit into the barn which we could protect with the extra hay in the second pole building. Maybe I'd better order a couple of semi loads of hay, just in case. I'd wait until mid-year, the Olympics weren't until August. All the stock tanks had floats with valves to keep them full. I'd better get some tarps to cover that hay.

We had plenty of parts for all of the vehicles, but if we removed the more sensitive parts and stored the vehicles in the pole building after we removed the hay, that might serve as a faraday cage and protect anything we'd overlooked. Been there, done that, got the Solar Flare of 2006 T-shirt. Everyone's vaccinations were current, no worry there. About the only thing I could think of to load up on was Kellogg's Special K vanilla almond flavored cereal. I ate about a box a week of that, so maybe I'd better get a few cases, just in case. And, maybe 4-5 50# bags of Act II popcorn from Sam's Club at \$10.95 a bag. I'm sure that our 20 cases of 57oz cans Folgers coffee would get us over the hump at least. We had a lifetime supply of Yuban, one can. We had some Maxwell House and Hills Bros, too.

I am a man of simple tastes, boiled potatoes, green beans and round steak or hamburger steak would keep me going for a very long time. I could do pinto beans and rice for nearly forever. Goulash? Keep it simple and I could do that for a very long time. I just needed my cereal, popcorn and coffee plus a few cases of Pall Malls and I was good to go until I ran out of smokes or died of lung cancer, whichever came first.

I had a back way mapped out that would get us into Navajo Depot wherein a set of bolt cutters could unlock most of those igloos they had. We'd just have to count on luck to find the right igloos if it ever came to that. In California, the place to hit in the southland was Barstow/Yermo but here in the Flagstaff area, it was Navajo Depot. They had some of about everything we'd need. About the only things we didn't have weapons wise was an Mk 19 or a Bushmaster cannon, with appropriate ammo. We didn't really have what one would call fixed fortifications, unless one considered our fighting holes. Maybe we should get a few mules to haul some of our stuff and make ourselves mobile. Nah, mules bray and give away a person's position.

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The things a person wanted to stock up on that were prescription only were Hydrocodone 7.5mg at \$20 a hundred and Alprazolam 0.5mg at \$15 a hundred. They were pain pills and chill pills. We could get 100 count bottles of Benadryl over-the-counter for about \$5 a bottle in either 25mg or 50mg strength. They were itch pills. We had several cards of Tamiflu, just in case our vaccinations didn't work.

## **A Simplified Guide to Antibiotics and Their Uses**



## Penicillins

The original penicillin-G (Pen G), along with more the common penicillin-V (Pen V), are used to fight gram-positive bacteria, such as anthrax. Penicillins, the brand name for penicillin-G, come in 400 and 800mg pills. Brand names for penicillin-V include V-Cillin-K and Pen Vee K. The basic Pen G may be purchased from farm and veterinary stores for far less expense than through pharmacies though make sure you only buy the refrigerated brand. The active ingredients in the unrefrigerated variety are far lower and potentially inadequate.

Pen G must be taken on an empty stomach. This is not as critical for Pen V. A dose of 250mg (i.e., 400,000 units), for people weighing 50 pounds or more, is taken four times daily. A rule of thumb for children weighing less than 50 pounds, the dosage should be reduced by 20% for every 10 pounds of less body weight.

These penicillins are more likely to cause allergic reactions, and fatalities, than synthetic penicillins such as ampicillin. Some of the allergic reactions are caused by procaine (Novocain) that is added in some Pen G formulas.

## Ampicillin

Brand names of this synthetic penicillin include Principen, Omnipen, Polycillin and Totacillin. These are also effective against gram-positive microbes such as anthrax. Dosages of ampicillin are the same prescribed for penicillin. This antibiotic should be taken, ideally, on an empty stomach.

Strains of anthrax that resist penicillin may be more susceptible to destruction by ampicillin. Also, ampicillin may be more helpful than penicillin for killing a broader spectrum of infections.

## Cephalosporins

These are also effective against anthrax. One gram of Cephalexin taken every six hours is recommended. Brand names for this are Keflex, Keflet and Keftab. One gram of the related Cefadroxil, brand named Duricef, should be taken every twelve hours.

## Erythromycin (Macrolide family of antibiotics)

Erythromycin and its relatives provide a broader spectrum of coverage than penicillin's. Brand names of Erythromycin, Pediamycin, Erythrocin, Eryc, EES, Ery-Tab, PCE, Ilosone, and E-Mycin. Other related antibiotics, such as clarithromycin (Biaxin) and azithromycin (Z-pak or Zithromax) may also be effective. A liquid form of erythromycin, called Gallimycin, is available for injection. The oral dose of this injectable product is the same.

Taken on an empty stomach, this may be used to treat more difficult cases of anthrax. If upset stomach occurs, it should be consumed with a bit of food. Avoid eating citrus fruits or products, which deactivate these antibiotics during digestion. Note: Fatal heart attacks may result from taking these antibiotics in combination with Seldane (terfenadine), Hismanal, or Seldane-D.

For individuals weighing 150 pounds or more, a 500mg dose is recommended. People weighing less should reduce their dosage proportionately.

### Aminoglycosides

These antibiotics that are effective against anthrax, tularemia, and the Bubonic plague, include: Streptomycin, Gentamycin, and Neomycin. They can all be extremely toxic. Primary organs at risk for destruction by the aminoglycosides include the kidneys and inner ears.

Each of the aminoglycosides must be injected, and cannot be taken orally. The oral dosage forms of these antibiotics are effective only against gastrointestinal (GI) tract infections of the stomach and intestines.

Gentamycin (Garacin) powder can be purchased in bulk. It cannot be absorbed when taken orally, but it can be effective against certain biologicals striking the GI tract such as botulism.

Streptomycin, taken two to four times daily, in one to four gram doses, equally spaced throughout the day. It can be used in combination with tetracycline until the person's fever breaks. Then the tetracycline can be continued alone. Otherwise, streptomycin should be used consistently for a week to ten days.

Gentamycin, is effective against tularemia and the plague. It should be injected intramuscularly or intravenously every eight hours in emergency measures of 1.7mg per kilogram body weight. As soon as symptoms of disease disappear, the dose should be reduced to 1.0mg per kilogram of body weight for the remaining 7-10 day period. This antibiotic is available in bulk through veterinary stores. It is likely that this less expensive product may be successfully used orally to defend against the plague or tularemia germs infecting the gut.

Neomycin, when given in doses of 500mg, four times daily, may be helpful against anthrax, plague, and tularemia, though it has not been traditionally prescribed for these. Use this only if the other aminoglycoside antibiotics are unavailable.

### Fluoroquinolones

In daily doses of 300mg per kg of body weight (i.e., 65mg per pound), Ciproflavoxin (Cipro) is effective against tularemia and anthrax. The daily dose should be divided into four doses taken every six hours for two weeks. Following the terrorist attacks on Sep-

tember 11, 2001 on the Pentagon and World Trade Center, this extremely expensive drug has been in high demand as the FDA's antibiotic of choice against anthrax.

### Chloramphenicol

Effective against anthrax, tularemia and plague, Chloramphenicol (Chloromycetin) has a relatively high rate of lethal side effects. Thus, persons allergic to safer antibiotics should only use it, or in the event other medications are unavailable. More expensive than other antibiotics, this injectable product can also be consumed orally and absorbed effectively into the bloodstream. Ideally, taken on an empty stomach, it may be consumed with food to reduce stomach upsets.

Chloramphenicol has the same spectrum of activity as erythromycin. Thus, it should never be given with erythromycin unless under emergency conditions at the first sign of biowarfare-induced illness. It may, however, be taken with Tetracycline for a broader spectrum of effectiveness. This combination may be wise if it is unclear which biological weapon is causing illness, and if rationing is not in effect.

The injectable form of chloramphenicol tastes awful! For people weighing 200 pounds or more, 2,500mg doses recommended.

### Tetracyclines

Tetracyclines (brand named Sumycin and Achromycin-V) are broad-spectrum antibiotics available from farm supply shops and veterinary stores in the form of oxytetracycline. These can be used effectively against all most strains of anthrax, plague, and tularemia.

Oxytetracycline comes in bulk powder form under the brand name Terramycin-343. It also comes in combination with livestock feed (Advance Calf Medic). This could be used in a pinch if other antibiotics were unavailable. There are 3 grams of active antibiotic in each pound of feed. A low dose could be provided by consuming almost 1.5 ounces; a high dose twice that could be measured and eaten.

Two newer classes of tetracycline are Doxycycline and Minocycline . Brand names for these tetracyclines include the Doxycyclines-Vibramycin, Vibra-tabs, Monodox and Doryx; and the Minocyclines called Minocin.

Tetracycline is typically taken four times a day, doxycyclines once per day or twice per day when taken with Minocycline. The two newer cyclines can be taken with food, not the older tetracycline. They, thus, tend to cause fewer stomach upsets. Doxycycline is typically less costly than traditional tetracycline, and Doxycycline and Minocycline provide a broader spectrum of antibiotic effectiveness than the old standard. Stains of biological weapons that may have been manufactured to resist tetracycline might be more susceptible to the newer cyclones.

As a rule of thumb, four 250mg doses of tetracycline are prescribed daily, that is, one dose every six hours for your typical 100-pound person. For persons weighing less than 100 pounds, reduce this dose accordingly. For instance, if a 100-pound person receives 1,000mg per day, then a 50-pound person would receive 500mg per day, or four 125mg doses q. 6 hours. The Doxycycline dosage is typically 200mg the first day, and 100mg doses following for up to ten days. The oxytetracycline (Terramycin) dose is the same as standard tetracycline. Another alternative tetracycline, called demeclocycline (Declomycin), may be substituted for standard tetracycline employing the same dose schedule as well.

### **Preserving and Administering Your Antibiotics**

Most antibiotics and drugs can be preserved by refrigeration, so long as they are kept dry. If traveling through extreme temperatures, antibiotics should be encased in Styrofoam containers, at best, and efforts should be made to avoid heat or freezing cold.

Warning: No drug should be consumed beyond its expiration date, especially Tetracycline antibiotics. Severe reactions may result from this expired antibiotic. However, when faced with a life-or-death situation, as might be presented with biological warfare or bioterrorism, such chances might have to be taken.

Antibiotics are typically administered orally or by injection. However, if the patient is comatose, the oral route may be circumvented rectally by using a plastic oral syringe available in most drugstores. This should be inserted as deeply into the rectum as possible. Use of a few drops of water, then larger amounts of cocoa butter, for dissolving the antibiotic. Cocoa butter is available in most drugstores in sticks that are melted in a jar placed in hot water. The butter is commonly used for suppositories and will hold the antibiotic for absorption better than water. Water may run out of the rectum and thereby precious antibiotic may be lost. So if water is all you have, use as little as possible to dissolve and inject the measured amount of powdered antibiotic.

Antibiotic tablets can be crushed and powdered by placing them between two napkins on a hard surface and pounding them with another flat hard object or instrument. The absorption of active antibiotic is less, given the rectal route of administration. For this reason, the dosages should be increased to compensate.

We had managed to combine nearly everyone's advice into a single story. And the full impact of it was that about the worst thing that happened had been a solar flare and a few ANFO explosions. One thing was especially clear; preparedness takes thought and some money. I thought about reorganizing the tale, but decided against, it tells you how it happened, when it happened.

Media speculation was rampant, running from another Tim McVey to eco-terrorists to Muslim extremists. One thing was clear, the government wasn't talking, either because they didn't have a clue or was moments away from arrests and didn't want to tip their

hand. Here in Sedona, all of that chain link fence and sturdy gates were giving us a closed in feeling. We'd even gone so far as to set up home schooling for Miguel's boys rather than have them off the farm for several hours a day.

When did being prepared become being paranoid? We'd moved from Phoenix to get out into the open air, away from the traffic and crush of people. We'd started off on the right foot, building a shelter and putting up a little food. Our little generator and what we had were more than enough to weather an attack on the country by the Soviet Union.

Did we overreact when food became scarce? Or was it that chain link fence we put in? It might or might not keep the 'bad guys' out, but it made us feel like prisoners. We'd been lucky when those 6 fellas tried to break in, Tom gave us heads up on that and we got them before they got us. With them all dead, we didn't really know what they'd been after. People don't usually do a home invasion without having some kind of goal in mind.

As long as I remember to order that hay to protect the barn in case China attacks, we should be ok. Stephen Hawking had posed a question on Yahoo a couple of years before. Hawking's question: "In a world that is in chaos politically, socially and environmentally, how can the human race sustain another 100 years?" The correct answer probably came from the guy who said, "We can't". I think we gave up most of our options when they split that atom. In the beginning, only we had 'the bomb'. I suppose we shared it with our allies, England and France. It didn't take the Russians long to steal the secrets and they probably shared them with China. The Israelis 'didn't have the bomb' but there was India and Pakistan. North Korea claimed to have them and Iran was working on them.

Apparently Saudi Arabia purchased them from Pakistan. In 2003 members of the government stated that due to the worsening relations with the US, Saudi Arabia was being forced to consider the development of nuclear weapons. However, so far they have denied that they are making any attempt to produce them. It has been rumored that Pakistan has transferred several nuclear weapons to Saudi Arabia, but this is unconfirmed. In March 2006 the German magazine Cicero reported that Saudi Arabia had since 2003 received assistance from Pakistan to acquire nuclear missiles and warheads. Satellite photos allegedly reveal an underground city and nuclear silos with Ghauri rockets south of the capital Riyadh. Pakistan had denied aiding Saudi Arabia in any nuclear ambitions.

For certain, there were 7 nuclear nations and that ranged upward to 10, not counting Iran. The ultimate was who was lying and who was telling the truth. Read about Japan and their copy of our Peacekeeper missile. Japan has the third largest nuclear energy production after the US and France, and plans to produce over 40% of its electricity using nuclear power by 2010. Significant amounts of plutonium are created as a by-product of the energy production, and Japan had 4.7 tons of plutonium in December 1995. Many things occur than happen to be unconstitutional. Why would countries accumulate 5 tons of plutonium? Perhaps so they could deliver it to the North Koreans, they have a proven delivery system?

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"I wonder how many Hydrogen bombs Japan has built."

"Japan isn't a nuclear power, Rob, it's against their Constitution, MacArthur saw to that."

"I was reading on the internet that Japan had several tons of plutonium. It wouldn't take much for them to build a few bombs. They have that M-5 missile that's a knockoff of the Peacekeeper."

"We retired the peacekeepers."

"Right, but what did we do with the missiles themselves?"

"I heard that the rockets are being converted to a satellite launcher role by Orbital Sciences, as the OSP-2 Minotaur IV SLV, while their warheads will be deployed on the existing Minuteman III missiles."

"How many of those did we build?"

"114."

"We only deployed 50, what did they do with the remainder?"

"Uhh... I have no idea. They made a bunch of test flights to test the missile."

"12 or 13, but that leaves 50 missiles unaccounted for, Matt."

Author's Note: They fired 50 during testing and built an additional 114. The other information is correct as stated.

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Not that I favored nuclear weapons, but I wondered why we were reducing the number we had when the number of nuclear nations was increasing. Even if we eliminated all of our Minuteman III missiles, we'd still have 14 boomers each carrying 192 warheads. How did that square the President's intent to reduce the number of warheads to 1,700 or so?  $14 \times 192 = 2,688$ . Moreover, how did that square with the actual number of targets out there? I also wondered if we had reloads for the Ohio class boomers. Probably not, there wouldn't be any port left to put into and restock the subs.

If we had major catastrophes, I could see where the rule of 3s is in, but we really hadn't had anything like that. Not that we hadn't had problems, we had, but none were of the magnitude of a Yellowstone or WW III. During the Cold War we'd come so close so many times and we never told. I understood that the last event saw Boris Yeltsin with the nuclear suitcase on his desk, due to some missile test.

Shortly before 9 am on November 9, 1979, the computers at North American Aerospace Defense Command's Cheyenne Mountain site, the Pentagon's National Military Command Center, and the Alternate National Military Command Center in Fort Ritchie, Maryland, all showed what the United States feared most – a massive Soviet nuclear strike aimed at destroying the US command system and nuclear forces. A threat assessment conference, involving senior officers' at all three command posts, was convened immediately. Launch control centers for Minuteman missiles, buried deep below the prairie grass in the American West, received preliminary warning that the United States was under a massive nuclear attack.

The alert did not stop with the US ICBM force. The entire continental air defense interceptor force was put on alert, and at least 10 fighters took off. Furthermore, the National Emergency Airborne Command Post, the president's "doomsday plane," was also launched, but without the president on board. It was later determined that a realistic training tape had been inadvertently inserted into the computer running the nation's early-warning programs.

However, within minutes of the original alert, the officers had reviewed the raw data from the DSP satellites and checked with the early-warning radars ringing the country. The radars were capable of spotting missiles launched from submarines close to the US shores and ICBM warheads that had traveled far enough along their trajectories to rise above the curvature of the Earth. The DSP satellites were capable of detecting the launches of Soviet missiles almost anywhere on the Earth's surface. Neither system showed any signs that the country was under attack, so the alert was canceled.

Then:

On June 3, 1980, less than a year after the incident involving the training tape, US command posts received another warning that the Soviet Union had launched a nuclear strike. As in the earlier episode, launch crews for Minuteman missiles were given preliminary launch warnings, and bomber crews manned their aircraft. This time, however, the displays did not present a recognizable or even a consistent attack pattern as they had during the training tape episode. Instead, the displays showed a seemingly random number of attacking missiles. The displays would show that two missiles had been launched, then zero missiles, and then 200 missiles. Furthermore, the numbers of attacking missiles displayed in the different command posts did not always agree.

Although many officers did not take this event as seriously as the incident of the previous November, the threat assessment conference still convened to evaluate the possibility that the attack was real. Again the committee reviewed the raw data from the early-warning systems and found that no missiles had been launched. Later investigations showed that a single computer chip failure had caused random numbers of attacking missiles to be displayed.

Next:

On September 26, 1983, the newly inaugurated Soviet early-warning satellite system caused a nuclear false alarm. Like the United States, the Soviet Union realized the importance of monitoring the actual launch of ICBMs. However, the Soviets chose a different method of spotting missile launches. Instead of looking down on the entire Earth's surface the way US DSP satellites do, Soviet satellites looked at the edge of the Earth – thus reducing the chance that naturally occurring phenomena would look like missile launches. Missiles, when they had risen five or ten miles, would appear silhouetted against the black background of space. Furthermore, when the edge of the Earth is viewed, light reflected from clouds or snow banks has to pass through a considerable amount of the atmosphere. That view reduces the chances that clouds and snow may cause false alarms.

A satellite has to be in a unique position to view a recently launched missile silhouetted against the black of space. To get that view, the Soviet Union picked a special type of orbit that it had used for its communications satellites. Those orbits, known as Molnyia orbits, come very close to the Earth in the Southern Hemisphere but extend nearly a tenth of the distance to the moon as the satellite passes over the Northern Hemisphere. From that position high above northern Europe, the Soviet Union's Oko ("Eye") early-warning satellites spend a large fraction of their time viewing the continental US missile fields at just the right glancing angle. However, shortly after midnight Moscow time on September 26, 1983, the sun, the satellite and US missile fields all lined up in such a way as to maximize the sunlight reflected from high-altitude clouds.

Whether that effect was a totally unexpected phenomenon is hard to know. That may have been the first time this rare alignment had occurred since the system became operational the previous year. Press interviews with Lt. Col. Stanislav Petrov, the officer in charge of Serpukhov-15, the secret bunker from which the Soviet Union monitored its early-warning satellites, indicated that the new system reported the launch of several missiles from the US continental missile fields. Petrov had been told repeatedly that the United States would launch a massive nuclear strike designed to overwhelm Soviet forces in a single strike.

Why did that false alarm fail to trigger a nuclear war? Perhaps the Russian command did not want to start a war on the basis of data from a new and unique system. On the other hand, if the sun glint had caused the system to report hundreds of missile launches, then the Soviet Union might have mistakenly launched its missiles. Petrov said that he refused to pass the alert to his superiors because "when people start a war, they don't start it with only five missiles. You can do little damage with just five missiles."

And finally:

Early on the morning of January 25, 1995, Norwegian scientists and their American colleagues launched the largest sounding rocket ever from Andoya Island off the coast of Norway. [Sounding rockets collect data on atmospheric conditions from various altitudes.] Designed to study the northern lights, the rocket followed a trajectory to nearly



930 miles altitude but away from the Russian Federation. To Russian radar technicians, the flight appeared similar to one that a US Trident missile would take to blind Russian radars by detonating a nuclear warhead high in the atmosphere.

That scientific rocket caused a dangerous moment in the nuclear age. Russia was poised, for a few moments at least, to launch a full-scale nuclear attack on the United States. In fact, President Boris Yeltsin stated the next day that he had activated his "nuclear football" – a device that allows the Russian president to communicate with his top military advisers and review the situation online – for the first time.

However, we can be fairly confident that Yeltsin's football showed that Russia was not under attack and that the Russian early-warning system was functioning perfectly. In addition to the string of radars surrounding the border of the former Soviet Union, Russia had inherited a complete fleet of early-warning satellites that, even by 1995, still maintained continuous 24-hour coverage of the US continental missile fields. In the early 1990s Russia had still managed to launch replacement satellites for its early-warning system as the previous ones died out – thereby retaining continuous coverage. Because of those satellites, Yeltsin's display must have shown that no massive attack was lurking just below the horizon.

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Counting the Cuban Missile Crisis, that made 5 times we'd come very close to wiping ourselves out. There were dozens of possible scenarios, ranging from a war between India and Pakistan to a confrontation between China and the US over Taiwan. There was always the possibility that Israel would use nuclear weapons they didn't have to eliminate the Iranian facilities which were enriching uranium for 'peaceful' purposes. That became more realistic for a while when Israel found it necessary to enter the Gaza Strip in 2006. It had even been rumored that George W. Bush consulted his nuclear football aboard Air Force One on 9/11.

Sooner or later someone was going to start something that someone else would finish for them. My money was on that crazy guy running North Korea. He lost a lot of face in 2006 when he couldn't get the US to shoot down his missiles.

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*President Bush noted today in a speech for the Veterans of Foreign Wars that the US was prepared to deal with Taiwan should they push for independence during the 2008 Olympics in Beijing. The US has maintained extra ships in Yokosuka following the launch of several short range and one long range missile on July 4, 2006. In 2005, Japan and the US jointly pledged to protect Taiwan if attacked by China. Subsequent statements indicated that the protection might not be forthcoming in the event Taiwan unilaterally declared independence. At the moment, the US has 3 carrier strike groups in the western Pacific area, including the Indian Ocean.*

*Concerns were raised last week when the Legislative Yuan heard renewed calls for independence from the DPP representatives. The Anti-Secession Law passed by the third conference of the 10th National People's Congress of the People's Republic of China ratified on March 14, 2005, formalized the long-standing policy of the People's Republic of China to use "non-peaceful means" against the "Taiwan independence movement" in the event of a declaration of Taiwanese Independence.*

*Secretary of State Condoleezza Rice met with Taiwanese representatives late in the day but declined comment. It has long been anticipated that Taiwan might take advantage of the Olympic Games in Beijing during August to declare independence.*

"I knew it; it's going to be China."

"That's bull; we can take out all of their forces in less than a day. They simply wouldn't dare."

"Including their missile launch sites?"

"Those too, most of them anyway."

Dropping 2 atom bombs on Japan had ended WW II. Even if we could take out most of the Chinese missile sites, they still had 2 SSBN submarines with 12 and 16 warheads. The only way the Chinese could be sure we wouldn't take out those missile sites was if the missiles weren't there. Perhaps, if Taiwan declared independence, they'd find themselves in a position where they had no choice other than to launch a first strike.

The Air Force carefully trains the people manning our missile silos. The Captains of the boomers know that someday they may be called upon to launch their deadly cargo. Both groups are trained not to think of the people those warheads might be aimed at. The US national plan is to never make a first strike and only launch on warning. That became clear in the early '50s when Truman fired MacArthur.

We built them smaller and more powerful. Eventually, we decided not to build the really big bombs ala 20mT and focus on smaller, adjustable bombs and warheads. Strangely, we did that years before Arnold made *Collateral Damage*. We focused on precision, having the luxury of having the bomb first. The CEP of some of our missiles wasn't worth mentioning, so they made it a point not to. Close counts.

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We of the senior generation didn't have a lot to do except sit around and try to not get fat. Our hired hand Miguel was sort in between generations and then came our kids, 6 of them and 6 spouses. Don't forget our grandchildren, we had them but they were all the same, poopy diapers, wanting to be fed, burped or something. They'd be more fun in a few years. We could tell them great tales of how we saved the country from the Cu-

bans back in '62. Or how we voted for Reagan to free the hostages and put an end to the Cold War. We'd start off with, "Well, I remember when..."

We had years of learning stored between our ears and even more stored on our computers. That safe full of gold wasn't so full any more, but what we had was worth more, and it evened out. We could tell them how we used to buy gasoline for 18¢ a gallon, not that they would believe us. We could tell them about 1¢ candy and 5¢ Snicker bars, but wouldn't tell them we were lucky to make \$100 a week or that the new car only cost \$2,500. Sue's Jeep Cherokee cost maybe 20 times as much.

Eventually, we'd get ourselves to a point, as a world, where there actually would be a War to End All Wars. We'd wipe out 80% of our population, either in the attacks, the aftermath or the starvation that followed. If we only regressed 100 years, we'd be lucky. Even if we could produce the fuel for our machines, they'd eventually wear out or parts would become unavailable. We'd run out of primers and power and our guns would become awkward clubs.

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*The Republic of China today declared independence from the People's Republic of China. The US has 4 CSGs in the western Pacific in anticipation of such a move. With the 2008 Olympic Games in Beijing, the PRC has been uncharacteristically silent. They have issued an alert to their naval forces and we understand that their missile batteries across the Formosa Straits are on high alert status. While there has been no word from the White House, we assume that US Forces have been moved to a higher alert status.*

The hay that we bought in July was all stacked against the barn. We began to move vehicles into the second pole building and Matt Jr. began to remove the sensitive parts. The livestock was moved from the pasture to the feedlot, just in case. We'd been ready since the '70s, when we were in our 30s. We had all turned 69 this year, life just wasn't fair. Thirty some years ago, we could have dealt with this, but now...

"Sue is monitoring the TV."

"Sarah is with her, Rob. How much time do you think we will have?"

"Half an hour, give or take. We can detect on launch and I'm sure they have the EAS standing by."

"Maybe the Chinese won't react."

"They don't have a choice, Matt, they passed that law. Did the TV say where we positioned our CSGs?"

"Three are well off the east coast of Taiwan. The other is in the Sea of Japan."

"Any word on the boomers?"

"They sailed shortly after the announcement came out. They only waited long enough to take on stores. That included the SSBNs and the SSGNs."

"What status would you guess we're at?"

"Don't know, maybe DEFCON 3."

"Where's the government?"

"Cheney is wherever he goes to hide out and they didn't say where Bush was going. The House and Senate adjourned."

"Supreme Court?"

"Didn't say."

"I'll bet they're wishing now they hadn't revealed the location of the bunker at the Greenbrier."

"Didn't they close that for remodeling?"

"It reopened."

"As a shelter or for tours?"

"Don't know. They give tours, but it's fully equipped."

"Do you want to put the livestock in the barn?"

"Not yet, let's wait and see what happens."

"Sue, what were you planning on for supper?"

"Beans."

"Let's hope we don't get attacked for a day, huh?"

*...Ticonderoga class cruiser intercepted several No-Dong IRBM aimed for Japan. Pac III batteries intercepted the remainder as they approached Japan. A White House spokesman said the launch constituted an act of war by North Korea. UN representatives are unavailable for discussions as most have departed New York within the past 24 hours.*

"How much warning would we get if China used their type 94 SSBN?"

"A few minutes at most. If I were a betting man, I say they'd put it off our east coast."

"I don't think so. The type 094 SSBN mounts 16 JL-2 SLBM with a maximum range of 8,000kms. When deployed, this missile allows Chinese SSBNs to target portions of the United States for the first time from operating areas located near the Chinese coast. Equipped with the JL-2 missiles, the Type 094 SSBN would only have to patrol just to the northeast of the Kuril Islands to hold about three-fourths of the United States within its missile's range. That type 92 they have is almost too noisy to use."

"Someone is going to have to stay up tonight to keep an eye on the TV."

"Are you volunteering?"

"Not me, I need my beauty rest."

Over beans and homemade bread, we decided that one couple from each family should each take a shift, putting 2 couples on watch for 4 hours at a time. We'd take the day watch, a privilege of having managed to live for so long. There was no last minute rush to buy things from Costco or Sam's Club. We didn't need a whole lot, disposable diapers and maybe some extra baby food. None of the girls cared to use regular diapers, of which, we had many.

*The closing ceremonies of the 2008 Summer Olympic Games were held today in Beijing and Chinese authorities gave team representatives 24 hours to leave China, signaling perhaps the beginning of the Chinese response to the declaration of independence by the Republic of China.*

*A Pentagon spokesman indicated that the US had raised its defense condition one level in response, declining to state the actual Defense Condition. Capitol Hill and indeed all of Washington have been quiet during the past 7 days since the Republic of China declared independence. Over the course of the past week, all American Naval forces have put to sea in what is seen by many as a move to preserve the fleets in the event of a war.*

*The Air Force has redeployed the 20 B-2s stationed Whiteman Air Force Base plus the B-52Hs and B-1Bs to undisclosed locations. All military installations have been on full lockdown since last week when the Pentagon cancelled all leaves and ordered troops to return to their posts. Historically, this is the highest state of alert the military has been at since October of 1962.*

## When We Were Young – Chapter 10

"If we have to go on full lockdown ourselves, what's the plan?"

"I only want to run the small generator so people will need to clean out their refrigerators and freezers and put everything in the shelter or the storeroom. If we do have to use the shelter, we don't want to come out to rotting food or whatever. Moreover, when we do exit the shelter don't expect to use anything larger than the 60kw generator. It should be winter by then so air conditioning won't be a problem. Tell everyone to set their furnaces on heat and the temperature at 55°. And, tell them to turn off their hot water heaters."

"How are we going to care for the livestock?"

"I have a pair of the radiation suits. Besides, we shouldn't get much radiation here."

"You said how, but you didn't say who."

"Why you and me, of course; we wouldn't want to endanger any of the youngsters, would we?"

"I can still..."

"Yes, but Sue and Sarah can't have kids, so it won't make any difference if you and I get a small dose of radiation."

"Gosh, I hope not."

"Well, Matt, I hope we don't have a war, but it doesn't appear to be up to you or me."

"How long will we be in the shelter?"

"I figure 2-3 weeks tops. It's going to depend on a lot of things we don't have any control over, like the wind direction, where they hit us and the type of explosion as in ground burst or air burst."

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"Daddy, wake up, it's time."

"End of the world time?"

"I'm afraid so. Get what you need and head to the shelter; we've been waking everyone up since word came."

"How much time do we have?"

"About 15 minutes."

"I'm just going to throw on a robe; I need a shower before I get dressed."

"Whatever, hurry."

I put on a robe and grabbed the duffel bag of clothes we had prepared to take to the shelter. Sue was in the kitchen putting most of the contents of the refrigerator into the trash and only putting a small portion in a box. I told her I come back and take the trash out and she said Tom would do it. I should go down and make sure the radios were all switched to ground because of a possible EMP.

I kept the radios unplugged and always left the antenna connector in the ground position, but I didn't bother to explain again. I turned off the hot water heater on my way to the shelter. Once there, I took a quick shower and dressed. I didn't bother to shave, I didn't want a razor in my hand when the ground shook.

We had practiced this drill so many times over the past 30 years; it was downright boring, just like 100 times, or more, before. We kicked in the 60kw generator and cut the outside power. The only clue we'd have when the end came would be the TV. Some talking head was explaining what people should be doing at this very moment. I occurred to me if he didn't shut up and do it himself, this could be his final appearance. Then, I realized it was a recorded message. About that time, the TV died for want of a signal. I reached up and started the elapsed time timer I put in years before.

"Well, that tears it; welcome to life people, Part II is just about to begin."

"Darn, I liked Ppart I just fine Rob."

"How high does that timer go?"

"9,999 hours, 59 minutes and 59 seconds. After that, it starts over."

"Why so long?"

"Just in case we had to go to 2,401 hours, 7 to the 4<sup>th</sup> power. I made up a table on my computer that measures 7 to the 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> powers in 0.1 increments."

"Why not higher?"

"That's 700 days. If the radiation isn't down by then, it might not matter; the next increment would be 4,902 days or approximately 13.42 years."

"I have another question."

"What?"

"We were already in the middle of a food crisis as it was, what will this do to us?"

"Decrease the demand for exported grain?"

"Will there be any grain to export?"

"Probably, after the nuclear winter."

"When will that happen?"

"I believe that it has already started, but it probably hasn't started to snow, yet."

In 1982 a special issue of the journal *Ambio* was devoted to the possible environmental consequences of nuclear war; it included an article by Paul Crutzen and J. Birks on atmospheric effects. They re-assessed and re-affirmed the consequences for the ozone layer noted in the 1975 National Academies of Science report (up to 70% of the ozone layer might be destroyed); and drew attention for the first time to the likely large amounts of smoke that would be released.

In 1983 the "TTAPS" study (from the initials of the last names of its authors, R.P. Turco, O.B. Toon, T.P. Ackerman, J.B. Pollack, and Carl Sagan) undertook a systematic study of the atmospheric consequences; partly inspired to write the paper both by the suggestions of one Dr. A.M. Salzman (who, unlike the TTAPS authors, believed that the initial dust thrown into the air would be primarily responsible for the climate changes) and by cooling effects due to dust storms on Mars. To carry out a calculation of the effect they used a simplified two dimensional model of the Earth's atmosphere that assumed that conditions at a given latitude were constant.

In 1984 the WMO commissioned G. S. Golitsyn and N. A. Phillips to review the state of the science. They found that studies generally assumed a scenario that half of the world's nuclear weapons would be used, about 5-6,000 Mt, destroying approximately 1,000 cities, and creating large quantities of black carbonaceous smoke –  $1-2 \times 10^{14}$  grams being mostly likely, with a range of  $0.2 - 6.4 \times 10^{14}$  grams (NAS; TTAPS assumed  $2.25 \times 10^{14}$ ). The smoke resulting would be largely opaque to solar radiation but transparent to infra-red, thus cooling by blocking sunshine but not causing warming from enhancing the greenhouse effect. The optical depth of the smoke would be four or more. Forest fires resulting from non-urban targets could enhance these numbers. Dust from near-surface explosions against hardened targets could also contribute; each Mt of explosion could release up to 5 Mt of dust, but most would quickly fall out; high altitude dust is estimated at 0.1-1 Mt per Mt of explosion. The theory of large-scale fires was recognized as a weak point; with data from Hamburg and Hiroshima cited as examples. Burning of crude oil could also contribute substantially.

The 1-D radiative-convective models used in these studies produced a range of results, with cooling's of 15-42 °C between 14 and 35 days after the war, with a "baseline" of



about 20 °C. Somewhat more sophisticated calculations using 3-D GCMs (Alexandrov and Stenchikov (1983); Covey, Schneider and Thompson (1984); which would be considered primitive by today standards) produced similar results: temperature drops of between 20° and 40°C, though with regional variations.

All calculations show large heating (up to 80 °C) at the top of the smoke layer at about 10 km; this implies a substantial modification of the circulation there and the possibility of advection of the cloud into low latitudes and the southern hemisphere. The report made no attempt to compare the likely human impacts of the post-war cooling to the direct deaths from explosions.

"So, it's going to get cold?"

"Yes, and after that, hot with a lot of ultra violet radiation."

"And the bottom line is?"

"Video at 11."

"Seriously."

"We have a lot of sun block, wide brimmed hats and enough food until we can grow some kind of crops."

"When do we go take care of the animals?"

"After 49 hours when the radiation level is 1% of the peak level."

"But you started the countdown clock immediately."

"For a time frame, I record the radiation levels every 15 minutes from now on or have someone else do it. From the beginning time to the peak time will be the number of hours we'll have to add to the elapsed timer."

"It's just a shame you don't have a second clock and we could start it when the radiation peaks."

"We won't know that it has peaked until after the fact. But, I do have a second clock."

"Fine, restart it every 15 minutes until the radiation falls off."

I dug out the second clock and set it up. I wouldn't start doing what Matt suggested until I had a reason to believe the radiation level was leveling off a little. At 10mph, it would take radiation about 38 hours to reach us from Los Angeles. I, or someone, would record the wind speed and direction and make a best guess when the radiation from there

would hit us. It was probably the largest target that would produce fallout for us. The distance was ~380 miles.

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We started doing the clock thing at 25 hours because the wind speed was bit higher than I estimated. At 31 hours and 45 minutes the clock wasn't reset, indicating that the radiation had peaked around 31.5 hours. It peaked at ~315R/hr. Our maximum allowable exposure level was 104mR/hr or 0.00033 of the peak level. That point would occur, according to my calculations, around 63 days after the peak. It was a surprise, but it would take 9 weeks to reach a minimum level for 24/7 time above ground and we were only getting fallout. We could feed the livestock at 80.5 hours, if we decided to wait for the radiation level to hit 3.15R/hr.

The suits I bought provided limited protection although they were the best thing I could find. They provided a protection factor of 3 against Beta radiation and 10 against gamma radiation.

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A nuclear explosion vaporizes any material within the fireball, including the ground if it is nearby and this is combined with residual ionizing radiation to produce fallout. The sources of this residual ionizing radiation are:

- Fission products. These are intermediate weight isotopes which are formed when a heavy uranium or plutonium nucleus is split in a fission reaction. There are over 300 different fission products that may result from a fission reaction. Many of these are radioactive with widely differing half-lives. Some are very short, that is, fractions of a second, while a few are long enough that the materials can be a hazard for months or years. Their principal mode of decay is by the emission of beta radiation, usually accompanied with gamma radiation. Approximately 60 g of fission products are formed per kiloton of yield. The estimated activity of this quantity of fission products 1 minute after detonation is 1.1 ZBq, equal to that of 30 Gg of radium, in equilibrium with its decay products.

- Unfissioned nuclear material. Nuclear weapons are relatively inefficient in their use of fissionable material, usually only 2%-40% of the fissionable material undergoes fission and much of the uranium and plutonium is dispersed by the explosion without undergoing fission. Such unfissioned nuclear material decays by the emission of alpha particles and is of relatively minor importance. Although, one should realize that a fission-fusion-fission bomb used most of the fissionable nuclear material.

- Neutron-induced activity. If atomic nuclei capture neutrons when exposed to a flux of neutron radiation, they will, as a rule, become radioactive (neutron-induced activity) and then decay by emission of beta and gamma radiation over an extended period of time. Neutrons emitted as part of the initial nuclear radiation will cause activation of the weapon residues. In addition, atoms of environmental material, such as soil, air, and

water, may be activated, depending on their composition and distance from the burst. For example, a small area around ground zero may become hazardous as a result of exposure of the minerals in the soil to initial neutron radiation. This is due principally to neutron capture by sodium (Na), manganese, aluminum, and silicon in the soil. This is a relatively negligible hazard because of the limited area involved.

- Higher actinides are formed during a nuclear detonation. The neutron flux is very high so too little time exists between each neutron capture for beta decay. Hence a different group of isotopes is formed to those which are formed in a normal low flux power reactor (S-Process). This is an example of the R-Process which is also seen in exploding stars. These higher actinides are known as minor actinides in the context of used power reactor fuel. Some of the higher actinides were first found in the fall out from bomb tests, for instance einsteinium (element 99) was first found in the fallout from a hydrogen bomb test

There are many types of fallout, ranging from the global type to the more area-restricted types.

Worldwide fallout:

After an air burst the fission products, unfissioned nuclear material, and weapon residues which have been vaporized by the heat of the fireball will condense into a fine suspension of very small particles 10 nm to 20  $\mu\text{m}$  in diameter. These particles may be quickly drawn up into the stratosphere, particularly if the explosive yield exceeds 10 kT. They will then be dispersed by atmospheric winds and will gradually settle to the earth's surface after weeks, months, and even years as worldwide fallout.

The radiobiological hazard of worldwide fallout is essentially a long-term one due to the potential accumulation of long-lived radioisotopes, such as strontium-90 and caesium-137, in the body as a result of ingestion of foods incorporating these radioactive materials. This hazard is much less serious than those which are associated with local fallout and, therefore, is not discussed at length here. Local fallout is of much greater immediate operational concern.

This type of fallout is featured in the novels *On the Beach* by British author Nevil Shute and *Do Androids Dream of Electric Sleep?* by Philip K. Dick.

Local fallout:

In a land or water surface burst, large amounts of earth or water will be vaporized by the heat of the fireball and drawn up into the radioactive cloud. This material will become radioactive when it condenses, with fission products and other radio contaminants that have become neutron-activated.

There will be large amounts of particles of less than 100 nm to several millimeters in diameter generated in a surface burst in addition to the very fine particles which contrib-

ute to worldwide fallout. The larger particles spill out of the stem and cascade down the outside of the fireball in a downdraft even while the cloud rises, so fallout begins to arrive near ground zero within an hour and more than half the total bomb debris is deposited on the ground within about 24 hours as local fallout.

Severe local fallout contamination can extend far beyond the blast and thermal effects, particularly in the case of high yield surface detonations. The ground track of fallout from an explosion depends on the weather situation from the time of detonation onwards. In stronger winds, fallout travels faster but takes the same time to descend, so although it covers a larger path, it is more spread out or diluted. So the width of the fallout pattern for any given dose rate is reduced, where the downwind distance is increased by higher winds. The total amount of activity deposited up to any given time is the same irrespective of the wind pattern, so the overall casualty figures from fallout will generally be independent of the winds. But thunderstorms can bring down activity as rain more rapidly than dry fallout, particularly if the mushroom cloud is low enough to be below, or mixed with, the thunderstorm.

Whenever individuals remain in a radiologically contaminated area, such contamination will lead to an immediate external radiation exposure as well as a possible later internal hazard due to inhalation and ingestion of radio contaminants, such as the rather short-lived iodine-131, which is accumulated in the thyroid.

Factors affecting fallout:

Location

There are two main considerations for the location of an explosion: height and surface composition. A nuclear weapon detonated in the air, called an air burst, will produce less fallout than a comparable explosion near the ground. This is due to the fact that less particulate matter will be contaminated and kicked up by the explosion. Detonations at the surface, surface bursts, will tend to produce more fallout material.

In case of water surface bursts, the particles tend to be rather lighter and smaller and so produce less local fallout but will extend over a greater area. The particles contain mostly sea salts with some water; these can have a cloud seeding effect causing local rain-out and areas of high local fallout. Fallout from a seawater burst is unusually difficult to remove once it has soaked into porous surfaces, because the fission products are present as metallic ions which become chemically bonded to many surfaces. Water and detergent will not remove more than about 50% of this activity from concrete or steel, which will require sandblasting or acidic treatment. After the Crossroads underwater test it was found that wet fallout needs to be immediately removed from ships by continuous water wash down (such as from the fire sprinkler system on the decks).

For subsurface bursts, there is an additional phenomenon present called "base surge". The base surge is a cloud that rolls outward from the bottom of the subsiding column, due to an excessive density of dust or water droplets in the air. For underwater bursts

the visible surge is, in effect, a cloud of liquid (usually water) droplets with the property of flowing almost as if it were a homogeneous fluid. After the water evaporates, an invisible base surge of small radioactive particles may persist.

For subsurface land bursts, the surge is made up of small solid particles, but it still behaves like a fluid. A soil earth medium favors base surge formation in an underground burst. Although the base surge typically contains only about 10% of the total bomb debris in a subsurface burst, it can create larger radiation doses than fallout near the detonation, because it arrives sooner than fallout, before so much radioactive decay has occurred.

### Meteorological

Meteorological conditions will greatly influence fallout, particularly local fallout. Atmospheric winds are able to bring fallout over large areas. For example, as a result of a Castle Bravo surface burst of a 15 mT thermonuclear device at Bikini Atoll on March 1, 1954, a roughly cigar-shaped area of the Pacific extending over 500 km downwind and varying in width to a maximum of 100 km was severely contaminated. There are three very different versions of the fallout pattern from this test, because the fallout was only measured on a small number of widely spaced Pacific Atolls. The two alternative versions both ascribe the high radiation levels at north Rongelap to a downwind hotspot caused by the large amount of radioactivity carried on fallout particles of about 50-100 micrometers size.

After Bravo it was discovered that fallout landing on the ocean disperses in the top water layer (above the thermocline at 100 m depth), and the land equivalent dose rate can be calculated by multiplying the ocean dose rate at two days after burst by a factor of about 530. In other 1954 tests, including Yankee and Nectar, hotspots were mapped out by ships with submersible probes, and similar hotspots occurred in 1956 tests such as Zuni and Tewa. However, the major US 'DELFI' (Defense Land Fallout Interpretive Code) computer calculations use the natural size distributions of particles in soil instead of the afterwind sweep-up spectrum, and this results in more straightforward fallout patterns lacking the downwind hotspot. For civil defense purposes it is simpler.

Snow and rain, especially if they come from considerable heights, will accelerate local fallout. Under special meteorological conditions, such as a local rain shower that originates above the radio-active cloud, limited areas of heavy contamination just downwind of a nuclear blast may be formed.

### Effects of fallout:

A wide range of biological changes may follow the irradiation of animals. These vary from rapid death following high doses of penetrating whole-body radiation, to essentially normal lives for a variable period of time until the development of delayed radiation effects, in a portion of the exposed population, following low dose exposures.

The unit of actual exposure is the Röntgen which is defined in ionizations per unit volume of air, and all ionization based instruments (including Geiger counters and ionization chambers) measure exposure. However, effects depend on the energy per unit mass not the exposure measured in air. A deposit of 1 joule per kilogram has the unit of 1 Gray. For 1 MeV energy gamma rays, an exposure of 1 Röntgen in air will produce a dose of about 0.01 Gray, i.e., 1 centigray (cGy) in water or surface tissue. Because of shielding by the tissue surrounding the bones, the bone marrow will only receive about 0.67 cGy when the air exposure is 1 Röntgen and the surface skin dose is 1 cGy. Some of the lower values reported for the amount of radiation which would kill 50% of personnel (the 'LD50') refer to bone marrow dose, which is only 67% of the air dose.

### Short term

Median lethal dose (LD50): When comparing the effects of various types or circumstances, that dose which is lethal to 50% of a given population is a very useful parameter. The term is usually defined for a specific time, being limited, generally, to studies of acute lethality. The common time periods used are 30 days or less for most small laboratory animals and to 60 days for large animals and humans. It should be understood that the LD50 figure assumes that the individuals did not receive other injuries or medical treatment.

It was estimated some years ago that with the best possible medical care, the LD50 for gamma rays is 3.5 Gy, while under more dire conditions of war (a bad diet, little medical care, poor nursing) that the LD50 will be 2.5 Gy (250 Rad).

At 1 hour after burst the radiation from fallout in the crater region is 30 Grays per hour (Gy/hr) for a surface burst. A cumulative dose of 3.5 Gy is fatal to half of a population of humans (it has been estimated that the LD50 dose under the conditions of nuclear war – poor diet, poor medical care etc. – would be 2.5 Gy). There have been few documented cases of survival beyond 6 Gy. One person at Chernobyl survived a dose of more than 10 Gy, but many of the persons exposed there were not uniformly exposed over their entire body. If a person is exposed in a non-homogeneous manner then a given dose (averaged over the entire body) is less likely to be of a lethal dose. For instance if a person gets a hand/low arm dose of 100 Gy which gives them an overall dose of 4 Gy then they are more likely to survive than a person who gets a 4 Gy dose uniformly over their entire body. A hand dose of 10 Gy or more will likely result in loss of the hand; a British industrial radiographer who got a lifetime hand dose of 100 Gy lost his hand because of radiation dermatitis. Most people become ill after an exposure to 1 Gy or more. The fetuses of pregnant women are often more vulnerable than the host body and may miscarry, especially in the first trimester. Though the human biology resists mutation from large radiation exposure; grossly mutated fetuses usually miscarry, and this often causes gene-faults. Civilian dose rates in peacetime range from 30 to 100  $\mu$ Gy/a.

Fallout radiation falls off exponentially relatively quickly with time. Most areas become fairly safe for travel and decontamination after three to five weeks.

The most dangerously known emissions from fallout are gamma rays, which travel in straight lines, like ordinary light. The fallout particles emit gamma rays in the same way that a light bulb emits light. Gamma rays cannot be seen, smelled, or felt. Special equipment is required to detect and measure gamma rays (Such as Geiger counters, dosimeters).

For yields of up to 10kT of TNT, prompt radiation is the dominant producer of casualties on the battlefield. Humans receiving an acute incapacitating dose (30 Gy) will have their performance degraded almost immediately and become ineffective within several hours. However, they will not die until 5 to 6 days after exposure assuming they do not receive any other injuries.

Individuals receiving less than a total of 1.5 Gy will not be incapacitated. Between those two extremes, people receiving doses greater than 1.5 Gy will become disabled; some will eventually die.

A dose of 5.3 Gy to 8.3 Gy is considered lethal but not immediately incapacitating. Personnel exposed to this amount of radiation will have their performance degraded within 2 to 3 hours, depending on how physically demanding the tasks they must perform are, and will remain in this disabled state at least 2 days. However, at that point they will experience a recovery period and be effective at performing non-demanding tasks for about 6 days, after which they will relapse for about 4 weeks. At this time they will begin exhibiting symptoms of radiation poisoning of sufficient severity to render them totally ineffective. Death follows at approximately 6 weeks after exposure, although results may vary.

Long term

Late or delayed effects of radiation occur following a wide range of doses and dose rates. Delayed effects may appear months to years after irradiation and include a wide variety of effects involving almost all tissues or organs. Some of the possible delayed consequences of radiation injury are life shortening, carcinogenesis, cataract formation, chronic radio dermatitis, decreased fertility, and genetic mutations.

"Are you ready to go?"

"Sorry, I was just reading this bit I copied off Wiki. I understand Rads and Rems, but now they don't use those terms and I'm lost."

"Do you know why it doesn't matter?"

"Why?"

"Because the survey meters we bought from Radmeters4U are calibrated in Rads and all the information that I have is based on Rads and Rems. The Röntgen Equivalent in Man or REM is a unit of radiation dose. It is the product of the absorbed dose in

Röntgens (R) and the biological efficiency of the radiation. More precisely, assuming a radiation weighing factor  $rW=1$ , 1 rem equals 1.07185 Röntgen. The conversion factor has been readjusted from 1 to 1.07185 so that 100REM equals 1 Sievert; the Sievert is the recommended SI derived unit, and in many cases is the legally prescribed unit. The more recent SI unit is the Gray, which is defined as 1 joule of deposited energy per kilogram of tissue. Thus one Gray is equal to 100 rad."

"So 1 Sievert is 100 Rems and 1 Gray is 100 Rads?"

"Sort of."

"I know how it works, if I don't die, I'll probably live."

"Close enough."

"What kind of suit is this?"

"They call it Demron. It provides shielding against low to moderate gamma radiation, X-Ray radiation, high and low energy beta particles and alpha particles."

"What next?"

"Put on the mask and then the hood. We'll have to use duct tape to seal any open seams. After we've fed the animals, we can use the basement shower to wash ourselves off. Make sure you don't snag the suit."

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We fed the animals twice a week from then on. At 2 weeks, the radiation level was ~315mR/hr. That was when we began to carry weapons when we went topside. It sure seemed to take a long time to fall to 100mR/hr, another 7 weeks. We were carrying a couple of those Mossberg shotguns, it wouldn't matter if they got lethal dose of radiation. I wouldn't call the guns junk, but they sure weren't Remington's or Winchester's even though they pretty much look the same.

In the interim, we watched the radiation level fall, watched movies, tried new recipes using the food we bought from various suppliers and even popped popcorn. Have you ever watched the Ridley Scott movie, *Gladiator* with Russell Crowe? I've seen it maybe a half dozen times and it always chokes me up at the end.

In the beginning, we didn't stay out too long trying to keep our dosage of radiation low. However, as the radiation went lower, the manure went higher, leaving us little choice except to shovel some chit. The suit's protection factor didn't come close to that of the shelter. The shelter had 12' of soil and a concrete lid, giving a protection factor of about 10 to the 45<sup>th</sup> power. We weren't getting much additional radiation showing up on our dosimeters so we spent a little more time outside every time we went.



The scanner began picking up ham calls once we raised the antenna and switched the unit to the Diamond D-130 J Discone. We just listened, none of the hams were from our immediate area and nobody seemed to be running a poll to see who had survived. We began to write the name of major cities and military installations hit in the attack and when the total went over 1,000, began to suspect that it had involved more than China.

It was dark every time we went out, regardless of the time. Was it the TTAPS study or the one that followed that talked about extensive cloud cover? I think maybe it was both, but I could always check again. One other thing we noticed was the temperature, it had fallen steadily ever since the day of the attack. This was far more than fall cooling, by the time we were ready to exit full time; it had snowed and appeared it could snow any moment.

In addition to Flagstaff, one of the cities on our list was Phoenix and a second location was the Palo Verde Nuclear Power Plant 50 miles west of Phoenix. The only other locations they hit in Arizona was Holbrook, apparently aimed at their coal fueled power plant, and Tucson. That meant a double whammy for the people in Phoenix, triple if you counted the fallout from LA. On our last trip out, we set the thermostats to 65° but didn't turn on the hot water heaters, who knew when we'd get more propane?

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"It doesn't look a whole lot different, now does it?"

"What did you expect; all the houses brown off their foundations? We'd have seen that the first time out of the shelter. Did you get a reading on the wind generated by the bomb or whatever they dropped on Flagstaff?"

"I must have been occupied, sure didn't."

"You weren't occupied, it was my job and I didn't get it either."

"Did you tell me everything?"

"I didn't tell you about fallout. The effects of a 1mT surface burst assuming a wind speed of 15mph, a wind direction of due east and a time frame of 7 days are:

3,000 Rem

Distance: 30 miles

Much more than a lethal dose of radiation. Death can occur within hours of exposure. About 10 years will need to pass before levels of radioactivity in this area drop low enough to be considered safe, by US peacetime standards.

900 Rem

Distance: 90 miles

A lethal dose of radiation. Death occurs from two to fourteen days.

300 Rem

Distance: 160 miles

Causes extensive internal damage, including harm to nerve cells and the cells that line the digestive tract, and results in a loss of white blood cells. Temporary hair loss is another result.

90 Rem

Distance: 250 miles

Causes a temporary decrease in white blood cells, although there are no immediate harmful effects. Two to three years will need to pass before radioactivity levels in this area drop low enough to be considered safe, by US peacetime standards.

Radius of destructive circle: 1.7 miles

12 pounds per square inch

At the center lies a crater 200 feet deep and 1000 feet in diameter. The rim of this crater is 1,000 feet wide and is composed of highly radioactive soil and debris. Nothing recognizable remains within about 3,200 feet (0.6 miles) from the center, except, perhaps, the remains of some buildings' foundations. At 1.7 miles, only some of the strongest buildings – those made of reinforced, poured concrete – are still standing. Ninety-eight percent of the population in this area is dead.

Radius: 2.7 miles

5 psi

Virtually everything is destroyed between the 12 and 5-psi rings. The walls of typical multi-story buildings, including apartment buildings, have been completely blown out. The bare, structural skeletons of more and more buildings rise above the debris as you approach the 5-psi ring. Single-family residences within this area have been completely blown away – only their foundations remain. Fifty percent of the population between the 12 and 5-psi rings are dead. Forty percent are injured.

Radius: 4.7 miles

2 psi

Any single-family residences that have not been completely destroyed are heavily damaged. The windows of office buildings have been blown away, as have some of their walls. The contents of these buildings' upper floors, including the people who were working there, are scattered on the street. A substantial amount of debris clutters the entire area. Five percent of the population between the 5 and 2-psi rings are dead. Forty-five percent are injured.

Radius: 7.4 miles

1 psi

Residences are moderately damaged. Commercial buildings have sustained minimal damage. Twenty-five percent of the population between the 2 and 1-psi rings are injured, mainly by flying glass and debris. Many others have been injured from thermal radiation – the heat generated by the blast. The remaining seventy-five percent are unhurt.”

"What are peacetime levels?"

"The individual dose rate of natural radiation the average inhabitant of Earth receives is about 2.2 mSv per year. That would be about 22 $\mu$ Rem. If, for the sake of simplicity, we assume 1mRem equals 1mR, the safe level of 104mR per hour is (4.7x8766) or ~41,400 times the peacetime level. However, since pregnant women and children are more susceptible to radiation, we'll limit their exposure to 12 hours a day for the foreseeable future."

"We're all going to die aren't we?"

"Only if we starve to death or someone else kills us."

"How do you figure?"

"In the first place, the radiation level will continue to fall. In the second place there isn't anyone better armed than we are in the entire state of Arizona except for the military. In the third place, we can almost walk to Navajo Depot."

"Yeah right, we'll just walk up to the front gate and say, 'Let us in'."

"My map only shows the way to the back of the Depot."

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"Are we going to do Thanksgiving and Christmas packages this year?"

"I don't think so. On the other hand, we should consider taking in any survivors who show up, assuming they're good people."

How badly I wanted to say that it was a dumb question, it might be a couple of years before we could get a garden to grow; such was the uncertainty of the aftermath of a nuclear war. It was like a dark, cloudy day at noon on the good days and worse on the bad days. Supposedly, that would clear and we'd get more sunshine than we wanted. If it got hot enough, we'd be running the air conditioners hence the big generators and possibly all 3. We could crank out enough biodiesel to replace what the big generators burned; I figured we'd better get started refilling what had been used during the 9 weeks we were down in the hole.

If one unit produced 55 gallons in 3 hours, we could produce 8 batches in 24 hours, 440 gallons times 2 machines or 880 gallons a day. That was just about what we'd burn up running all three of the generators for 24 hours. It was good to start it now, during the winter when fuel consumption was down, because it gave us time to learn to use the equipment. Other than propane, the next item we'd need would be vegetable oil and more corn to make ethanol. I assumed that AmeriGas would have plenty of propane if we used up our 35,000 gallons of propane and I was more interested in where we'd get more vegetable oil, or diesel fuel. Could Chevron still supply us?

About the last thing I was worried about was food. We had enough food for 30 people for 10 years although we didn't have 30 people. I know it sounds like a lot, but there are 365.25 days per year or 3,652.5 days in 10 years and times 30 people means 109,575 people days of food, enough for the population of Sedona for 10 days. Oh, you say, that's different. You bet your bippy it's different. Even with all the food in town taken into account, we maybe had enough for everyone for 30 days. Hey buddy, can you spare a dime? No habla.

"Matt, would you get the parts and get all of the vehicles running please?"

"Are we going somewhere?"

"We need to be ready to. Plus we need to know that all of the vehicles work."

"It's cold out."

"Put a heater in the shed."

"Will a kerosene heater run on diesel fuel?"

"Yes. They may smell a little worse, and you may need to tweak the air screw a tad to keep 'em from smoking, other than that, no problem." (Our diesel was B-100, it worked fine.)

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"Astronaut Jimenez, what is the first thing you're going to do once you reach orbit?"

"I'm going to cry a lot."

"Did NASA give you something to break your fall, Jose?"

"Yes ... de state of Nebada."

"Is that your crash helmet?"

"Oh! I hope not!"

Jose would say that the best part about the mission was blastoff: "I always take a blast before I take off ... otherwise I wouldn't get in that thing."

(The Mercury Seven called him the "eighth astronaut" and, Virginia, Jose was Puerto Rican, not Mexican. What did your author have in common with Jose? The blastoff, I hated to fly in airplanes.)

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It took Matt Jr. longer to get the vehicles running than it did to tear them down, but eventually, we had wheels. The ground was frozen hard and we discussed the possibility of filling a few holes in our supplies of defense material. Anything we could find, but an Mk 19 would be nice. A mounted Bushmaster cannon would be even nicer, especially if we could find ammo for both of them. The only difference between men and boys is the price of their toys.

The radiation would continue to fall and at the end of 700 days, reach 31.5mR. None of the younger women or children were being allowed to sleep above ground until the survey meter read 50mR, ~ 20,000 times average peacetime level. We'd reach that level around 475 days, nearly 1 year & 4 months after the peak. We used the material out of the suits to make over-garments for the younger men. Discrimination on the basis of age and gender? You're darned right! This is my place and if they don't like it, I guess they don't like it; I'm not in a popularity poll.

"Who won?"

"Nobody, we all lost."

"Did everywhere get blasted?"

"I don't know, there's some guy on 80 meters who keeps saying, "2LO Calling, London Calling."

*London calling to the faraway towns  
Now that war is declared-and battle come down  
London calling to the underworld  
Come out of the cupboard, all you boys and girls  
London calling, now don't look at us  
All that phoney Beatlemania has bitten the dust  
London calling, see we ain't got no swing  
'Cept for the ring of that truncheon thing*

*[Chorus]*

*The ice age is coming, the sun is zooming in  
Engines stop running and the wheat is growing thin  
A nuclear error, but I have no fear  
London is drowning-and I live by the river*

*London calling to the imitation zone*

*Forget it, brother, an' go it alone  
London calling upon the zombies of death  
Quit holding out-and draw another breath  
London calling-and I don't wanna shout  
But when we were talking-I saw you nodding out  
London calling, see we ain't got no highs  
Except for that one with the yellowy eyes  
The ice age is coming, the sun is zooming in  
Engines stop running and the wheat is growing thin  
A nuclear error, but I have no fear  
London is drowning-and I live by the river  
I live by the river*

"That's the original call sign for BBC. Do you suppose someone got one of their commercial radios to work and can call but not receive?"

"Not on 80 meters, no. It's probably some kid who found a radio and doesn't know how to switch between transmit and receive."

"Any idea where he is?"

"Nope, the antenna is omni-directional."

"Well, he'll probably quit."

"Yes, either when his battery runs out or he starves."

What Rob said was cold. It was also true, either the battery would be dead or the person on the other end of the radio would be dead and we wouldn't know which. Hams are rather innovative and if there was any way they could stay on the air, they would, even if it mean using a solar panel to recharge a battery and transmitting on a 12 (13.8) volt radio. If Rob had put up beam antennas for every band, can you imagine what his antenna would look like?

When we were young we got ready for what just happened to us. After that we sat around and wondered why we had spent the money and if it would ever happen. Rob always said it was a question of when and what, not if. They have a mad man in North Korea and that guy in charge of Iran wasn't any better, just much richer. He had oil money and bought things from just about anyone who would sell to him. Not him, the real guy in charge, the Ayatollah. He had billions of oil dollars in the bank and could buy whatever he wanted, he just needed a seller.

Apparently that nuclear program of theirs was just a careful disguise for their real intent, buy completed weapons from the Russian Mafia. The weapons would be mounted on completed No-Dong Scud Cs they were buying from North Korea. The Russians built a substantial quantity of the 5-80kT warheads for the Scud-B. Russia's TBM inventory

was limited to thousands of SS-1c/Scud B and SS-21/Scarab SRBMs as a result of the Intermediate Nuclear Force (INF) Treaty, which required the elimination of the FSU's extensive stocks of MRBMs.

In the 1970s, Leonid I. Brezhnev claimed that whoever started a nuclear war would be committing suicide, and he asserted that the Soviet Union would never be the first to use nuclear weapons. In the 1980s, Soviet civilian and military leaders adopted a similar stance, repeatedly declaring that no victor could emerge in a general nuclear war and that it would lead to the destruction of humanity. These statements seemed to modify Lenin's dictum that war is the continuation of politics.

Never be the first? But maybe the last, huh? Kim Jong-Il started it when he attacked Japan. Or, did the Republic of China start it when they declared independence? Does it matter? China fired conventional missiles at Taiwan; Kim fired nuclear tipped Scud's at Japan, part of his payment for the missiles North Korea provided Iran. Commentators had been right when they speculated that North Korea couldn't build a nuclear weapon small enough for a Scud missile. Nobody considered the possibility that Iran bought several Russian nukes for their missiles and North Korea's. Our CSG in the Sea of Japan got most of the Scuds and the PAC IIIs we provided Japan got the rest. At this point, it was no-harm, no-foul.

Then Iran launched on Israel and the Israel's launched their ready fighters equipped with those nuclear weapons they didn't have. In a nearly simultaneous move the Jericho missiles were fired from their silos. They weren't armed with conventional warheads. Fortunately for Israel, they also had several batteries of the PAC III missiles and were able to intercept the Iranian missiles with those and their own Barak and Arrow missiles. Don't believe me?

Israel Missile Update – 2005

The Risk Report  
Volume 11 Number 6 (November-December 2005)

Israel continues to maintain a powerful arsenal of "Jericho" ballistic missiles, capable of delivering a nuclear warhead to any point in the Middle East. Israel is also pursuing a military satellite program and has deployed several batteries of the Arrow missile defense system to shield against the missiles of its neighbors. Israel is not a member of the Missile Technology Control Regime and has been identified by the US Department of Commerce as a possible supplier of missile technology.

Ballistic Missiles

Israel maintains a sizeable arsenal of ballistic missiles that would enable it to deliver an offensive or retaliatory nuclear strike against any potential regional target. The core of Israel's arsenal is its fleet of two-stage "Jericho" missiles. Israel's Jericho-I missile is estimated to be capable of carrying a 450 to 650-kilogram payload up to 500 kilometers,

and the Jericho-II of carrying a 750 to 1,000-kilogram payload considerably more than 1,500 kilometers. The three-stage Jericho-III missile, reportedly under development, is believed to have a range of 4,800 kilometers. Israel's NEXT space launch vehicle, also under development, may consist of a bipropellant fourth stage (consisting of liquid fuel plus a liquid oxidizer) added to the three solid fuel stages of the Jericho-III missile. (The actual range of the Jericho-III is 4,800 to 11,500 km, 2,982 to 7,180 miles.)

Israel is also reportedly developing a new Long-Range Artillery (LORA) missile-which is said to be a precision-guided missile to strike stationary or semi-fixed targets. Defense News has described the IAI-produced LORA as capable of delivering a 570-kilogram warhead within a 200-kilometer range. According to Defense News, the LORA flew 120 kilometers in its March 2003 maiden developmental test flight before hitting its target in the Mediterranean Sea. Defense News also reported that the missile failed in a test in November 2003, but then succeeded in March 2005 when it hit a target some 200 kilometers from the launch site.

Israel also possesses the US-supplied Lance missile. The Lance is a liquid-fueled, short-range, mobile, nuclear-capable missile with a range of 130 kilometers and a payload capacity of at least 210 kilograms.

According to a report by the Congressional Research Service, Israel had deployed, by the year 2000, fifty Jericho-I missiles on mobile launchers and one hundred Jericho-II missiles on underground wheeled transporter-erector-launchers or railroad flat cars. In October 2003, the Los Angeles Times, citing Israeli and US officials, reported that Israel had modified the American-supplied submarine-based Harpoon anti-ship missile to carry nuclear warheads. However, some defense experts dismissed this report, claiming that it is impossible to make a Harpoon nuclear-capable without limiting its range and accuracy.

#### Arrow Anti-ballistic Missile Defense System

Israel continues to dedicate substantial effort to improving its ability to defend against foreign missile attacks. The core of Israel's missile defense, the Arrow program, is a joint US-Israel effort begun in 1988 to develop a system for destroying ballistic missiles launched from other countries by intercepting them before they enter Israeli airspace. During the past several years, Israel and the United States have been implementing the Arrow System Improvement Program (ASIP) in order to enhance the Arrow's ability to defeat longer-range ballistic missile threats emerging in the Middle East.

As part of ASIP, Israel conducted the tenth test of the Arrow missile in January 2003 by firing four interceptor missiles at four simulated incoming rockets. The test, described as a success by Israel Defense Forces, was the fifth for the integrated Arrow Weapon System, which includes the "Green Pine" fire control radar, the "Yellow Citron" fire management system, the "Brown Nut" launch control center, and the Arrow launchers and missiles.



Israel conducted another successful test of the Arrow missile in December 2003 by intercepting a "Black Sparrow" missile. The test was the sixth of the complete Arrow Weapon System. In July 2004, the Arrow intercepted a live Scud missile in flight; the previous tests had been with simulated Scud missiles.

After this string of successful tests, the Arrow System Improvement Program suffered an apparent setback in August 2004. During a test in California, an Arrow missile identified but failed to intercept its target, which was characterized as an "unreal threat" representing "an extreme condition." The target missile reportedly simulated an Iranian Shahab-3 or a Scud-D. Despite this failure, an Israeli defense official reportedly claimed that the Arrow was capable of intercepting a Shahab-3 missile.

In addition to the testing and development done under the Arrow System Improvement Program, Israel has also sought US cooperation in producing the Arrow. Israel Aircraft Industries (IAI) and Boeing signed an agreement in February 2003 to manufacture part of the Arrow missile in the United States. Boeing will be responsible for producing at least 35 percent of Arrow missile components, while IAI will be responsible for integration and final assembly of the Arrow missile in Israel. In March 2004, IAI awarded Boeing a \$78 million contract under which Boeing will assemble several sections of the Arrow II interceptor and will produce the canister that holds the interceptor in the launcher.

If you managed to follow that, Iran and Israel were going at it hot and heavy when either India or Pakistan decided it wanted to join the 'fun'. Each country has ~ 100 nuclear weapons, give or take. Apparently Pakistan aimed a missile at the Kashmir and it went too far, ending up in – you guessed it, China. When the US saw the hit in China, our forces were moved to DEFCON 1 and fingers were very near the triggers. China took less than 2 hours to react and when they did, they struck out in anger at everyone, India, Pakistan, Russia, Taiwan and lucky US. When the Russian defense system saw incoming missiles, they launched on China and lucky US. We fired all 450 Minuteman III missiles, successfully, and the missiles on 4 of the SSBNs, successfully. That gave us a second wave if we needed it.